TRANSFORMATION OF GENERAL EDUCATION IN BRICS COUNTRIES

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FOREWORD

Education is a key factor that secures any nation's long-term growth and development. It is a cornerstone in achieving strategic socio-economic goals, which is especially crucial for BRICS – a group of fast-growing countries seeking to close the gap between themselves and the developed world. There is a long list of tools that are needed to win this race and the modern education system is at the very top of this list.

It is an incontrovertible truth that states which fail to advance their education systems and introduce time-adequate learning practices risk being left out of global competition. That is a particularly acute issue today, when emerging technologies disrupt almost every aspect of human activity, changing the way people live, work and even think. Education systems are transforming as well: old standards and requirements are rapidly becoming obsolete. The need for change is obvious and it is crucial to ensure that BRICS positions itself at the forefront of this change.

In recent years, BRICS countries have achieved notable progress in terms of transforming their educational landscape. Most of the group's members are actively introducing such various cutting-edge instruments as personalised learning, gamification, experiential learning, microlearning, classroom digitalisation and much more. School enrolment in BRICS is gradually increasing: currently BRICS nations collectively educate about 50% of the global population. Yet education systems in BRICS nations face a number of strategic challenges, such as unequal access to education, gender inequalities, digital divide, disparities in education quality, a lack of top-level teaching staff, a mismatch between education and labour market requirements, inclusivity issues, demographic challenges and language barriers. Obviously, there is still a long way to go before education in BRICS countries becomes truly advanced and sustainable.

The following report examines these challenges as well as unique features, policies and novelties within BRICS education systems. It includes a detailed study of education systems in BRICS countries, providing a much needed big picture of BRICS education. Such comprehensive and elaborate studies allow us to discover pathways that can address challenges and introduce new features. The report also encourages education partnership and an exchange of best practices within BRICS. This is where the diversity of BRICS nations manifests itself as a massive competitive advantage. BRICS is able to accumulate unique education policies, experience and ideas from the wide range of its highly diverse member states. Partnership and exchange are the main factors that ensure development and competitiveness: BRICS nations have to make sure that their education structures stand the test of time to secure a bright future for themselves and the entire world.

Victoria Panova,
Head: BRICS Expert Council – Russia
Vice Rector
HSE University

PREFACE

How can research into world-wide education provide evidence that enables children to be happy, healthy and learn well? And what are the affordances that promote these aspirations in emerging economies as well as low- and middle-income countries? Global megatrends are shaping the world, both disrupting and energising opportunities that impact education and people's aspirations to develop. Megatrends require the profound contemplation of relevant, responsible and responsive resources that, on the one hand, when available may enable positive outcomes and buffer against any disaster caused by such megatrends, and, on the other hand, when absent may constrain positive progress and maintain inequality and marginalisation.

Enlisting education researchers from BRICS countries to reflect on practices that enable quality education for this book was a thoroughly considered decision. The discourse between responsive, relevant and responsible science was an impetus for the partnership that drove this book. This treatise, synonymous with that of democratising research, is to deliberately move away from what uniformly 'should be' in an education system, according to normalised, Global North and Eurocentric evidence, to 'what is' in education systems of countries that are unevenly underrepresented in the education evidence base. As a result of this measured partnership, the contextual and cultural perspectives of BRICS countries showcased in this book provide an example of how to enable education practices with meaning in similar emerging economies as well as low- and middle-income countries.

This book provides compelling evidence of the responsive path each country could take to address certain megatrends in ways that enable positive learning and wellbeing. Rather than valorising digital technology as an educational saviour of the marginalised masses, this book problematises the assumed seamless absorption of this education response by foregrounding contextual challenges that maintain inequality and hinder the adoption of a contextually unlikely and unattainable solution. The book examines an education agenda to buffer against the effects of an ominous dynamic: unemployment, employability and pervasive inequality. A key issue here is to consider how to transform current education structures into spaces that enable people leaving school to generate income in ways that promote their pride and sense of belonging and contribute to functional life worlds for fellow citizens. Similarly, such contributions reflect how education systems mitigate against social instability by foregrounding in-country practices, policies and movements that make the most of diversity and inclusivity to enable social justice, social cohesion, socio-cultural identity and social mobility. The megatrends of urbanisation and demographic shifts are evident in the way that countries plan their response to either increased or decreased demand for schools and teachers in rural areas, whilst simultaneously being prepared to supply more trained teachers and more school infrastructure in urban spaces. The book refreshingly delves into actual experiences at the school level, particularly in the daily learning and teaching lives of students and teachers in India and Brazil, to contemplate the way in which the effects of climate change is being managed to enable wellbeing and learning.

The intent of this book is not to compete with other works that describe macro-level views of education worldwide. Nor is it to contest existing multi-country endeavours to introduce a large-scale international education assessment as a mechanism to transform education. Rather, in an attempt to contribute knowledge to the aforementioned discourses and movements, this work drills into micro and meso country-level scales of education systems in a particular grouping of countries. Whereas mega- and macro-level scrutiny may provide cross-cutting indicators to draw the outlines of a picture title 'education progress', knowledge of meso- and micro-level resources and pathways that enable learning, wellbeing and health provides filters and colour palettes to show the unique fabric of what matters for education in each country and possibly for the world. The micro- and meso-level descriptions in this book of 'what is' may feed into a movement to develop additional constructs, indicators and measures to include in worldwide, large-scale education assessments.

Liesel Ebersohn,
Director: Centre for the Study of Resilience
Full Professor, Department of Educational Psychology
Faculty of Education
University of Pretoria

EXECUTIVE SUMMARY[1]

Educational Space of BRICS Countries

The educational systems in Brazil, Russia, India, China and South Africa exhibit both common features and significant differences driven by their unique socio-economic and historical characte-ristics. Despite the specific contexts of each of these countries, their educational systems have several shared features and universal approaches that allow them to be considered a part of the global educational space while also remaining a distinct entity. In this space, countries strive to achieve similar educational goals by using various approaches, which can be a subject for exchanging experience and best practices to enhance the quality and accessibility of education in all BRICS countries, considering their individual characteristics and development trajectories.

This report focuses on the general education systems of Brazil, Russia, India, China, and South Africa, as these founding BRICS members represent diverse socio-economic and cultural contexts, providing a robust foundation for analyzing educational transformations within the alliance. The analysis is limited to these five countries to ensure an in-depth exploration of their well-established systems while acknowledging the broader BRICS membership.

Compulsory Education: BRICS countries aim to ensure universal access to compulsory education. In most countries, compulsory education includes primary and secondary levels, but there are differences in duration. Early childhood education is also recognised as important, however its accessibility and quality depend on socio-economic conditions. Free compulsory education in public schools is guaranteed in all countries, and providing such education remains a common goal.

Education Management: In most countries, with some exceptions, the governance system is decentralised and involves both the federal and regional authorities. There are specific systems where education funding is a shared responsibility between the state, regions and municipalities. The private sector is also involved in education, but remains under the regulatory framework of the state. School boards and governing bodies play a role in decision-making at the local level.

Inclusive Education: All BRICS countries acknowledge the importance of inclusive education for children with special educational needs. There are special schools and classes, and support is provided to integrate students with special needs into regular schools. Although some educational and social barriers still exist, the number of disabled students attending mainstream schools has been increasing. Language barriers are a significant challenge for the inclusive education of children from ethnic minorities, Indigenous peoples and ethnic majorities (where colonial languages still dominate the choice of teaching and learning language). Specific approaches to inclusion involve creating specially adapted systems.

Quality of Education: Improving the quality of education is seen as one of the main goals and values in the education systems of BRICS countries. Major differences exist in education quality between urban and rural areas as well as between schools with different levels of funding.

1 See the executive summary table in Appendix.

Shortages of qualified teachers, particularly in remote areas, and inadequate professional development for teachers impact learning outcomes. Reform efforts are underway to improve curricula, teaching methods and assessment systems.

Types and Sizes of Schools: BRICS countries have both public and private schools. Most students attend public schools, but private schools may offer higher levels of resources. There are special schools for children with disabilities and specific types of schools depending on regional and cultural specifics (religious schools, schools for Indigenous peoples, for girls, etc.). School sizes can range from small rural schools to large urban institutions.

Early Childhood Development: All countries recognise the importance of early childhood development (ECD) in terms of preparing children for school and implementing special strategies to ensure access to quality services.

Challenges and Issues in Education Systems

Inequality of Access and Quality of Education: All BRICS countries face major regional and intra-regional inequalities in access to quality education, which are driven by socio-economic factors. Children from poor families and rural areas face limited opportunities compared to wealthier children from affluent urban centres. There is a gap between public and private schools in terms of resources, infrastructure and the quality of teaching, which also contributes to inequality. Access to pre-school education is uneven, affecting children's readiness for primary school.

Teacher Training and Professional Development Challenges: All BRICS countries have issues with the quality of teacher training and professional development, as well as attracting skilled professionals, especially in rural and remote areas. Insufficient teacher qualifications and a lack of continuous professional development negatively influence the quality of education. In some countries, teachers teach subjects beyond their specialisation, while low salaries and unfavourable working conditions result in attrition among qualified teachers and a low level of attractiveness of teaching as a profession. There are specific systems for teacher professional development, but they are not always particularly effective.

Mismatch between Education and Labour Market Requirements: In BRICS countries, there is a discrepancy between the knowledge and skills graduates acquire and the labour market requirements, as well as a mismatch in terms of the availability and quality of technical and vocational training structures.

Education systems often fail to keep pace with technological changes and do not prepare students for modern challenges. Vocational education is often undervalued and considered less prestigious than academic education. There is also a lack of focus on developing socio-emotional skills, such as leadership and communication, which are essential for a successful career in the modern economy.

Quality of Education: Problems with education quality are common across BRICS countries, as reflected in student performance in international and national comparative studies. Qualified teachers and resources are not distributed evenly between regions or between urban and rural areas. Overcrowded classrooms, outdated infrastructure and a lack of teaching materials and teacher qualifications negatively affect the quality of education. Some progress has been made in improving the quality of education, but this trend is not sustainable.

Issues with Inclusiveness: Improving inclusive education poses a challenge for all BRICS countries. Although the rights of people with disabilities to education are recognised, there are shortcomings in creating a barrier-free environment and in preparing educators to work with children with special educational needs. Children with disabilities have not been sufficiently integrated into mainstream schools, and there is a lack of specialised educational institutions and resources. The early identification of children with special needs and the provision of the necessary support is a common issue across all countries.

Cultural and Religious Specificities: Cultural and religious diversity not only offers opportunities, but creates additional challenges for education systems in all BRICS countries. There are certain issues that must be taken into account when considering cultural specificities in the development of educational programmes and materials. There are difficulties with ensuring equal access to education for representatives of different cultures and religions. The recognition and promotion of home languages as a pedagogical and developmental asset to promote quality education outcomes is an important but often challenging issue.

Demographic Challenges: Demographic changes present additional difficulties for the education systems of BRICS countries. Some countries are experiencing a population increase that requires the expansion of educational infrastructure, while others are seeing young people migrate from rural areas, which leads to school closures. Population migration creates issues with integrating migrant children into the education system. The need to support the aging population and retrain adults also affects educational policy. Despite varying current trends in national demographics, all countries will face a future population growth decline that impacts the education system.

Language Barriers: Linguistic diversity is a major challenge for the education systems of BRICS countries. The use of the dominant language of instruction, such as Portuguese in Brazil or English in South Africa, creates barriers for children whose home language is different. A lack of textbooks and materials in local languages limits access to quality education. Supporting multilingual education requires additional efforts and resources, as well as professional teacher training. The inclusion of home languages in instructional practice can result in positive educational outcomes and improved wellbeing.

Adaptation to Change: BRICS education systems are looking for ways to adapt to technological changes, global crises and climate change. Improving digital and technological literacy is crucial to ensuring that young people are ready for work and training in the digital economy. Global crises have highlighted the need for flexible learning formats, including remote education, and psychological support. Climate change requires integrating issues of environmental sustainability into curricula and fostering environmental awareness. BRICS countries need to develop adaptive strategies that take into account local specificities and global challenges.

Approaches and Strategies for Improving Education

Increasing Education Funding: Many countries strive to increase government investment in education to provide the necessary resources for schools, teachers and the implementation of educational programmes, including funding for infrastructure, teaching materials and teacher salaries. Numerous countries implement policies aimed at improving the mechanisms of resource allocation.

Curriculum Reforms: Countries frequently engage in curriculum and pedagogical reforms to enhance the relevance and practical benefits of national education. This includes the integration of new technologies, the development of Science, Technology, Engineering and Mathematics (STEM) education and the support of vocational training. It also involves the full consideration of the cultural traditions and languages of minority groups. The goals of ensuring historical continuity and overcoming issues related to historical legacy are also a focus of BRICS national interests reflected in official documents.

Development of Vocational Education: Many countries acknowledge the importance of technical and vocational education and training (TVET) in preparing students for the labour market. Efforts are directed towards providing quality training at TVET institutions and fostering cooperation between education providers and employers.

Attracting Teachers and Professionally Developing Their Qualifications: Countries emphasise the importance of high-quality teacher training and continuous professional development. This includes training programmes, qualification enhancement and creating incentives to attract and retain teachers. The assessment of professional skills is also considered.

Inclusive Education: Countries aim to create an inclusive educational environment that addresses the needs of all students, including those with disabilities, children from different cultural and linguistic backgrounds, and those living in remote or rural areas.

Multilingual Policy: In countries with multilingual populations, policies are promoted to support education in the home language, especially in primary grades, along with the simultaneous learning of a second language. This supports more effective learning, strengthens the new generation's self-esteem, identity and sense of belonging, and promotes cultural heritage.

Systematic partnerships: BRICS countries recognise the importance of partnerships across systems (i.e., classroom-school-community-district-province/state-government-enterprise) to ensure comprehensive support for schools and students.

Community Participation: Countries encourage the active participation of local communities, parents, extended families, small businesses, local services, teachers in school governance and decision-making on educational issues. This helps to create a more transparent and accountable education system and ensures the collaborative, effective and efficient use of locally available resources that enable quality education.

Extracurricular Education: BRICS countries recognise the importance of both formal and non-formal education. The development of digital skills and environmental education is integrated into curricula, along with measures to reduce inequality and support vulnerable groups. Lifelong learning is also taking on increasing significance. In some countries, there are unique systems of extracurricular education that are supported at the national level.

Political Context: The specific features of the political systems in BRICS countries influence approaches to education. In some countries, a vertical administrative system predominates, where decisions are top-down, while others show a trend towards dialogue and compromise among various levels of government and participants in the educational process. These differences determine how educational policies and reforms are formulated and implemented.

ABBREVIATIONS

AI	Artificial Intelligence
ASIDI	Accelerated Schools Infrastructure Delivery Initiative
B.Ed.	Bachelor of Education
BCE	Before Common Era
BRICS	An interstate association comprised of Brazil, China, Egypt, Ethiopia, India, Indonesia, Iran, Russia, Saudi Arabia, South Africa, United Arab Emirates
CBSE	Central Board of Secondary Education
CIE	Cambridge International Examinations
CONAE	National Education Conferences
CONAES	National Commission for Evaluation of Higher Education
CPC	Chinese Communist Party
CPTD	Continuing Professional Teacher Development
CRDP	Comprehensive Rural Development Programme
CST	China Standard Time
CWSN	Children with Special Needs
DBE	Department of Basic Education
DIKSHA	Digital Infrastructure for Knowledge Sharing
ECD	Early Childhood Development
ECE	Early Childhood Education
EJA	Youth and Adult Education
ESD	Education for Sustainable Development
FET	Further Education Training
FUNDEB	Brazil's Fund for the Maintenance and Development of Basic Education
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GET	General Education Training
GPI	Gender Parity Index
GRP	Gross Regional Product
HIV	Human Immunodeficiency Virus
IB	International Baccalaureate
IBGE	Institute of Geography and Statistics
ICT	Information and Communication Technologies
IKS	Indian Knowledge Systems Division
IKS	Indigenous Knowledge Systems
INEP	Institute for Educational Studies and Research
INR	Indian Rupee
IPO	Initial Public Offering
ISPFTED	Integrated Strategic Planning Framework for Teacher Education and Development
ITEP	Integrated Teacher Education Programmes
LiEP	South African Language in Education Policy
MHRD	Ministry of Human Resource Development
MOE	Ministry of Education
MoSPI	Ministry of Statistics and Programme Implementation
MTbBE	Mother Tongue-Based Bilingual Education
NCERT	National Council of Educational Research and Training
NCFSE	National Curriculum Framework for School Education
NCTE	National Council for Teacher Education
NCV	National Certificate Vocational
NCVET	National Council for Vocational Education and Training
NCVT	National Council for Vocational Training
NDRC	National Development and Reform Commission
NEET	Not in Education, Employment or Training
NEP	National Education Policy (Plan)
NEPA	National Education Policy Act
NES	National Education System
NFRE	National Framework for Rural Education

NHEQF	National Higher Education Qualifications Framework
NIOS	National Institute of Open Schooling
NISHTHA	National Initiative for School Heads' and Teachers' Holistic Advancement
NMM	National Mission for Mentoring
NNSSF	National Norms and Standards for School Funding
NPST	National Professional Standards for Teachers
NQF	National Qualifications Framework
NSC	National Senior Certificate
NSDA	National Skill Development Agency
NSDP	National Skills Development Plan
NSDS	National Skills Development Strategy
NSNP	National School Nutrition Programme
NSQF	National Skill Qualification Framework
OBC	Other Backward Class
ODL	Open and Distance Learning
PARAKH	Performance Assessment, Review and Analysis of Knowledge for Holistic Development
PED	Provincial Education Department
PES	Provincial Equitable Share
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PLFS	Periodic Labour Force Survey
PPP	Political-Pedagogical Project
PPP	Purchasing Power Parity
PRASHAST	Pre-Assessment Holistic Screening Tool
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RPWD Act	Rights of Persons with Disabilities Act
RTE Act	Right of Children to Free and Compulsory Education Act or Right to Education Act

RUB	Russian Ruble
SABER	Systems Approach for Better Education Results
SACE	South African Council for Educators
SASA	South African Schools Act
SCERT	State Council of Educational Research and Training
SEDG	Socio-Economically Disadvantaged Group
SEN	Special Educational Needs and Disabilities
SGB	School Governing Bodie
SIAS	Policy on Screening, Identification, Assessment and Support
SSA	Sarva Shiksha Abhiyan
STEM	Science, Technology, Engineering and Mathematics
SWAYAM	Study Webs of Active Learning for Young Aspiring Minds
TE	Teacher Education
TIMSS	Trends in Mathematics and Science Study
TPD	Teacher Professional Development
TVET	Technical and Vocational Education and Training
UDISE	Unified District Information System for Education
UGC	University Grants Commission
ULLAS	Understanding of Lifelong Learning for All in Society
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
USD	United States dollar
USSR	Union of Soviet Socialist Republics
UT	Union Territory
VET	Vocational Education and Training
VIE	Variable Interest Entity
ZAR	South African rand

INTRODUCTION

BRICS brings together countries that have demonstrated major achievements in economic and social development, as well as growing political and cultural influence globally. Undoubtedly, education has played a key role in this progress and will continue to serve as a driver of further advancement: “Each BRICS country at the national level strives to ensure accessibility and equity in education, as well as to promote the development of quality education” (Johannesburg Declaration II, 2023).

BRICS countries are home to large territories and vast populations. Collectively, the education systems of BRICS nations cover over one-third of the world’s schoolchildren and one-third of all schools worldwide, making them key players on the global educational stage: 678,263,225 students and 26,347,046 teachers at 1,942,255 schools (BRICS, 2024). As such, the experience gained from organising such large-scale education systems is certainly of interest to other countries in addressing the challenges of the present and future. This interest is heightened in the context of a shift away from the previously dominant approach of “hegemonic globalization” (Sousa & Moss, 2022) – an uncritical adoption of “best” policies and practices in education based on prescriptive recommendations by international organisations. There is growing recognition of the value of authenticity and sovereignty in educational policies, taking into account the demographic and sociocultural features, values and traditions of societies. BRICS countries have demonstrated leadership in introducing this approach.

This report is the first cross-national study on the state and development of general education systems in BRICS countries. In academic discussions, comparative studies of education in BRICS countries are not a new focus area (Altbach, 2013; Dalcin A. K. et al., 2020; Vos et al., 2020). In particular, much of the attention has focused on higher education (Williams, 2013), including attempts to enhance the competitiveness and prestige of universities (Carnoy et al., 2012; Altbach & Bassett, 2014), network collaboration and student academic mobility (Zhiltsova, Agibalova & Stukalova, 2015; David & Motala, 2017; Khomyakov, Dwyer & Weller, 2020). The internationalisation and attractiveness of national higher education systems are explored in the context of improving the efficiency of BRICS economies (Morgan & Guilherme, 2017; Chang, Chen & Xiong, 2018; Moreira & Raninchesk, 2018; Fan et al., 2022), along with the massification of higher education (Wolhuter & Chigisheva, 2020; Sokolova, 2024) and targeted government initiatives (Yuan, 2013; Dervin & Zajda, 2015), as well as foreign investments (Thomas & De, 2018; Titor & Cherkasova, 2024). However, school education rarely falls into the research spotlight, with studies typically limited to isolated publications that record general features of systems or cases on specific topics, such as pedagogy, the development of new knowledge or education for persons with disabilities (Chaudhary et al., 2012; Ngwakwe, 2014; Niemczyk, De Beer & Steyn, 2021; Masalimova et al., 2024), while avoiding comprehensive descriptions, analyses and broad comparisons.

This report does not seek to provide direct comparisons using universal metrics based on statistical data and comparative international studies, let alone attempts to create yet another ranking. Furthermore, the current state and development prospects of general education systems are not specifically examined through the lens of predefined universal goals and benchmarks, such as the UN’s Sustainable Development Goals, the indicators of various international organisations or policy analysis frameworks like the World Bank’s Systems Approach for Better Education Results (SABER). It is important to emphasise that despite the country-specific case studies, the text retains the individuality of an expert-driven approach in describing national education systems (NES).

Today, it is crucial to provide an opportunity to view models of education organisations and approaches to its development more broadly and objectively, incorporating often ignored aspects that reflect the specific social and cultural contexts of countries. We are seeing a growing body of evidence that highlights the significance of local contexts in the successful integration of borrowed policies, the crisis of universal global educational strategies, the limitations of the “one size fits all” approach and the failure of transferring “best practices” from systems that operate in entirely different contexts (Westheimer, 2005; Burdett & O’Donnell, 2016). Even international organisations themselves are beginning to recognise the importance of contextual adaptation (Heyneman & Lee, 2016; Niemann, 2022). However, efforts to analyse educational systems and policies “from context” – moving from challenges, goals and solutions specific to each context – remain rare compared with the universal approach of addressing global challenges with standardised solutions and implementing them in diverse settings.

From our perspective, BRICS countries provide a unique opportunity in this regard. Despite the diversity of their contexts, priorities and economic capacities, these nations are united by their commitment to sustainable development and social justice. At the same time, each country independently determines its own priorities, seeking tailored solutions to overcome unique challenges. This autonomy in shaping institutional policies enables the development of authentic strategies that account for unique historical and cultural contexts. One central feature of these countries is their geographic, social, cultural and economic diversity, which serves both as a challenge and a resource for developing their educational systems. Furthermore, a comparative analysis reveals unique combinations and interaction among these contexts. Conceptualising and accounting for contextual factors in different countries, along with recognising their specificities shaped by historical development stages and civilisational traits (Anikin & Tikhonova, 2016), is key to a meaningful analysis and comparison.

BRICS countries have major disparities in their territorial development, as well as striking differences between urban and rural areas or regions (states, provinces). When attempting to compare certain features (e.g., demographics or poverty), there is often greater similarity between capitals and major metropolises than between regions within the same country. This highlights the importance of identifying “best practices” not only at the country level but also for specific regions and groups within countries that share similar characteristics. Economic, demographic and cultural differences among countries give rise to specific opportunities and needs for certain groups of children and youth. These factors create distinct forms of inequality in terms of access to education, the duration of schooling and the provision of quality education that supports social mobility. Conversely, the economic capacities, institutional frameworks and political features of each country uniquely shape their approaches to regulating and advancing educational systems.

All countries face various forms of inequality in educational opportunities and must address the challenge of ensuring equitable and inclusive education. However, the scope of these inequalities, the prioritisation of educational challenges in policy and the available resources differ significantly across nations. Some are facing growing populations, while others are dealing with demographic decline. Some are grappling with underfunding in remote areas, while others are addressing the impact of migration on schools. Additionally, there is a pressing need to prepare young people either to find basic employment or to integrate themselves into advanced industries, thereby supporting the technological competitiveness of their nations.

Each BRICS country develops unique strategies tailored to its own social, cultural and economic features. For example, South Africa is directing major efforts toward integrating educational institutions to overcome the legacy of apartheid, which includes systemic partnerships (public-private-enterprise and school-community). This includes active collaboration between schools and local communities as well as addressing historical inequalities. In China, the government focuses on equalising access to quality education across the country's regions, which is particularly important for the development of remote and rural areas. While South Africa and India are addressing challenges related to engaging a large portion of children in education and reducing dropout rates, Russia and China in recent years have been concerned about the academic overload of students. In Brazil, the value of diversity, which is linked to the principle of self-declaration, is clearly articulated, with inclusivity becoming a central issue in Brazilian education. In contrast, Russia and China prioritise societal unity and uniform educational standards over adapting the system to the interests of specific groups.

The diversity in BRICS countries is not only a challenge, but also a resource for their educational systems. It compels governments to explore innovative approaches to developing inclusive and equitable educational structures while fostering social cohesion and cultural diversity. When addressing the unique forms of inequality in each nation, the acknowledgment of local realities and flexibility in educational strategies are key factors for successful development. Modern educational systems in BRICS countries also face several universal global challenges that require strategies to prepare the next generation for successful self-realisation in conditions of uncertainty and instability.

At the same time, universal approaches to cultivating future skills, such as digital, technological and ecological literacy, are localised to account for the specifics of labour markets, labour mobility and ecological diversity within individual countries. For instance, Brazil emphasises developing critical thinking and values of inclusion, preparing young people to meet global labour market demands and promoting social justice. In India, the educational system aims to balance the traditions of Vedic knowledge with modern labour market requirements, integrating these traditions into school programmes. China is paying increasing attention to the holistic development of students' personalities. In Russia, one of the key focuses of educational policy is the development of extracurricular activities and supplemental education systems to provide students with greater career guidance opportunities and to develop skills for their future lives and jobs.

In our report, we focus on the state of general education systems. However, it is undeniable that the opportunities for successful learning in school and the future trajectories of children are closely connected to the preceding and subsequent stages of education. As such, the country-specific chapters and the conclusion address such issues as accessible pre-school education, the alignment of pre-school education with formal school systems and the early identification and support of developmental disabilities.

A key limitation in cross-country comparisons of general education systems in BRICS countries is the variation in how each country defines and collects data on core indicators. These differences make direct numerical comparisons unreliable, as the figures reflect distinct methodologies, classifications and data collection practices rather than strictly comparable realities. As a result, a deeper contextual understanding is required beyond simply juxtaposing statistical indicators.

The report includes the following key sections:

The BRICS Educational Landscape: This section provides an overview of the scale and structure of the educational systems in BRICS countries. It highlights the demographic and cultural diversity of these nations as well as differences in their approaches to ensuring universal access to education. Special attention is given to the specific features of educational systems in terms of inclusion, enrolment coverage and the structure of different levels of education.

Country Contexts Shaping School Education Challenges: This section examines the social, economic and cultural conditions that shape the educational challenges in each country. The diversity of these contexts creates variations in the types of inequalities and requires unique policies to address them. The report considers both internal challenges, such as territorial and social inequalities, and external ones, including global economic and technological changes.

Responses to Challenges: This section is dedicated to analysing educational strategies and programmes that are designed to address the challenges outlined in the previous sections across BRICS countries. Examples of unique policies in each country are presented to evaluate their effectiveness and potential for replication.

Lessons Learned and Prospects for Cooperation: The final section of the report provides conclusions based on the case studies of BRICS countries. It examines shared insights that may be valuable for other developing nations. This section also raises the question of the role of international cooperation in education for achieving sustainable development goals.

CHAPTER ONE
Contextual and Systemic Diversity

BRAZIL

1. Some facts about Brazil

Brazil, officially the Federative Republic of Brazil, is the largest country in South America and the fifth largest globally by both area and population. Covering an area of approximately 8.5 million square kilometres, it shares borders with every South American nation except Chile and Ecuador. The capital city is Brasília, while São Paulo and Rio de Janeiro are its most populous and globally recognised cities. The official language is Portuguese, making Brazil the largest Portuguese-speaking nation in the world. Figure 1 shows Brazil in the context of South America and the division of the country into major regions.

According to the most recent census conducted by the Brazilian Institute of Geography and Statistics (IBGE), Brazil's population exceeds 203 million people. Brazil produces census data on its population every decade. The latest Population Census is from 2022 (it was scheduled for 2020, but could only be presented two years late due to the COVID-19 pandemic). The census data shows that 87.4% of the population lives in urban areas.

In geographical terms, the country has five regions, with the population highly concentrated in the Southeast (42% of inhabitants), the region that has the highest degree of industrialisation and is responsible for generating 52% of the national Gross Domestic Product (GDP); the second most populous region is the Northeast, which is home to 27% of the population, but produces only 14% of GDP; the third region in terms of population is the South with 15% of the population and 17% of GDP; the North has 9% of the population and produces 6% of GDP; the Central-West is home to 8% of the population and generates 10% of the national GDP.

Brazil is a federative republic composed of 26 states and one Federal District. It has a complex social structure marked by regional and economic disparities. Urban areas, particularly in the Southeast, are well-developed, while rural and Northern regions often have less access to education, healthcare and infrastructure. Social programmes such as Bolsa Família have been implemented to address poverty and inequality, though challenges persist.

It should be noted that there are immense environmental specificities in the different regions. The Northern region is home to 60% of the Amazon Rainforest biome, covering more than 4 million km² and possibly harboring the greatest biological diversity in the world. Its vast forests significantly influence regional and global climates and sequester around 70 billion tonnes of carbon (Marengo & Espinoza, 2016).

Although sparsely populated, the region is inhabited by around 22 million people, most of whom live in urban areas, but with various local communities, including Indigenous peoples and quilombolas (Brazilian Ministry of the Environment). It is impossible to describe all the characteristics of each region, but it is important to point out that some of Brazil's inequalities have regional specificities due to the concentration of income around the more industrialised regions (Southeast and South) and the challenge of protecting a wide range of important biomes in the North and Central-West.

In addition to environmental and economic characteristics, it is worth highlighting some features of the diversity of the Brazilian population. The country still has a large young population, although the age pyramid has been changing rapidly over the last two decades. In the early 2000s, young people aged 24 and under accounted for 50% of the total (IBGE, 2000), but now they only account for 34% of the Brazilian population (IBGE, 2022). This change significantly alters demand for education in a country that has yet to universalise basic education and still has little access to higher education.

In racial terms, Brazil's diversity is also important. According to the 2022 Population Census, 45% of the population self-declared as brown; 43% as white; 10% as black; 0.6% as Indigenous; and 0.4% as yellow. It is important to understand that the racial debate implies the idea of belonging when Brazilians self-declare their race. One factor to note is that self-declaration also applies to race/colour information in the school environment, and part of the system's challenge is the resistance of educational institutions to establishing self-declaration strategies, which means that in the case of educational statistics, there is a high percentage of undeclared racial information.

Population estimated at 203,062,512 inhabitants (IBGE, 2022)

Figure 1 – Brazil in the context of South America and its regional delimitations

Brazil's culture is a rich tapestry of Indigenous, African, European and Asian influences. This diversity is reflected in its music, dance, literature and cuisine. Samba and bossa nova are internationally recognised musical genres that originated in Brazil. The country is also famous for its vibrant festivals, such as Carnival, which showcases elaborate parades, costumes and music. Brazilian cuisine varies by region, but commonly features staples like rice, beans, cassava and a variety of meats.

Brazil has the largest economy in Latin America and ranks among the top ten largest economies globally. It is a mixed-market economy with significant contributions from agriculture, mining, manufacturing and services. Despite its economic potential, Brazil faces such challenges as income inequality, inflation and public debt.

2. Overview of the education system in Brazil

Based on the premise that education is a right for all people and a duty of the state, the Brazilian education system is organised with responsibilities divided among the federative entities to ensure education at its two levels (basic education and higher education), across three stages (early childhood education, primary education and secondary education) and through various modalities that address the needs of a diverse country.

A continental country faces the challenge of ensuring conditions for access, retention, and success in education, while taking into account its rich cultural diversity and addressing aspects of inequality within its territory. To understand the pathways that children, young people and adults navigate within the school system and the division of responsibilities for education, Table 1 summarises the different types of education provided. It should be noted that the Brazilian Federal Constitution requires 14 years of compulsory schooling, from age 4 to 17, i.e., early childhood education is compulsory for children aged 4 and 5; elementary education is compulsory from 6 to 14 years and secondary school is compulsory until the age of 17. The areas in the figure are coloured to indicate the predominant entities responsible for each stage and modality; occasionally, there may be some minority enrolments in administrative dependencies not specifically accounted for.

This form of organisation is decentralised in terms of its provision, which, on the one hand, ensures that education reaches the entire national territory. On the other hand, there are various challenges in funding public education due to the significant disparities in resource allocation among the country's 27 states and 5,570 municipalities.

In this context, the federal government is responsible for providing technical and financial assistance to combat inequalities, and it does this through constitutionalised mechanisms such as participation with a federal quota in Brazil's FUNDEB, which is now the main instrument for funding education in the country. However, it also operates constitutional programmes to support school transport in rural areas and universal school meals. The National School Feeding Programme is one of the longest-standing public policies in Brazil and part of the strategy of providing healthy food, preferably agroecological food (LIMA, et all, 2023). The programme encompasses all students in basic public education. In addition, the federal government runs programmes to support specific initiatives as a way of tackling problems in basic education.

Educational Provision Structure	Predominant responsibility					
Level	Step	Modality	M	S	F	P
Basic Education	Early Childhood Education (0 to 5 years) 4 and 5 years old is compulsory	Special education: Integrated into ordinary classes and specialised schools	■			■
		Bilingual education for the deaf	■			■
		Indigenous education	■	■		■
		Quilombola education	■	■		■
	Elementary School Fundamental (6 to 14 years compulsory)	Special education: Integrated into ordinary classes and specialised schools	■	■		■
		Bilingual education for the deaf	■	■	■	■
		Indigenous education	■	■	■	
		Quilombola education	■	■	■	
		Youth and adult education	■	■	■	
	Secondary Education (15 to 17 years compulsory)	Special education: Integrated into ordinary classes and specialised schools		■	■	■
		Professional education		■	■	■
		Bilingual education for the deaf		■	■	■
		Indigenous education		■		
		Quilombola education		■		
Higher Education	Undergraduate	Bachelors/ Licenciatura/ Technological		■	■	■
	Postgraduate	Lato sensu/ Stricto sensu		■	■	■

Table 1 – Organisation of supply in the education systems in Brazil by level, stage, modality and responsible administrative dependency

Source: Brazil legislation (Source: Brazilian educational legislation legend (M = municipal; S = state; F = federal; P = private).

To understand some of the current challenges in the Brazilian educational system, it is essential to consider the flow of students through the system, considering age-specific enrolment rates. The data in Table 2 summarises this information, and the following sections will explore some of the related challenges.

In basic education, the first stage is early childhood education, which serves students aged 0 to 3 in nursery schools and is not compulsory. Attendance rates vary from 22.05% in the North of the

country to 46% in the South and Southeast. Challenges in this stage include a major shortage of schools in rural areas and a lack of available places, particularly among the poorest quintiles.

Age GroupW	North	Northeast	Southeast	South	Central-West
0 to 3	22.05%	36.89%	46.74%	46.64%	33.36%
4 to 5	87.86%	95.06%	95.45%	92.58%	92.53%
6 to 10	99.13%	99.50%	99.42%	99.64%	99.76%
11 to 14	98.95%	99.21%	99.40%	99.53%	99.53%
15 to 17	87.90%	90.12%	92.09%	91.22%	89.26%
18 to 24	30.97%	27.93%	29.27%	32.07%	31.72%

Table 2 – Educational attendance rates by age group, sex (male, female) and region – Brazil, 2023

Source: Prepared by the Educational Data Laboratory based on IBGE/Pnad Continuous 2nd Quarter – Education Supplement 2023

The 4- and 5-year-old age group has considerably higher attendance, as this stage is compulsory, although there are still regional inequalities. Municipal schools are expected to account for 72.5% of enrolments in 2023. Notably, the private sector contributes 17.6% of enrolments through agreements with the public authorities, while only 9.3% of enrolments are at independently funded private schools. Despite the challenges, there is significant public policy coverage for this stage. However, there are major challenges related to teacher training, as current legislation still permits teachers with only secondary-level education to teach.

The elementary school stage serves the population aged 6 to 14. It is the longest compulsory stage in the country and is organised in two different formats. For students aged 6 to 10, single-teacher classes are predominant, and teachers with secondary-level training in the regular modality are also accepted. At this stage, the public provision of education is predominant, with 69.5% of enrolments in municipal schools and only 10.8% in schools run by the states; independently funded private schools account for 12.7% of enrolments. In many cities, there are no private elementary schools. One of the challenges at this stage is the low number of full-day classes offered, with the majority of students still attending school for only four hours a day.

Stage 2 is elementary school for students aged 11 to 14. Classes are predominantly organised by subject, with teachers holding specific degrees. The public network remains strong, with 44% of enrolments in municipal schools, 39.5% in state schools and 16.3% in independently funded private schools. Agreements with the public authorities are not permitted for private schools at this level. Despite teachers having higher education degrees, many of them teach subjects outside their areas of expertise. Providing comprehensive education is a significant challenge, with issues related to student flow and performance being particularly acute. While pass rates are 96% in the initial years of elementary school, they drop to 92% in the final years (BRASIL, 2023), with notable inequalities between regions, urban and rural students, and between the poorest and richest quintiles of the population.

This stage is available to those who were unable to attend school at the appropriate age, so regular Youth and Adult Education (EJA) is available in educational networks. Legislation allows for both regular attendance in schools for EJA, typically in the evening, and the option of sufficiency exams for students aged 15 in the event of primary education. However, the EJA policy has been significantly impacted by disruptions due to economic austerity and the pandemic.

The high school stage is currently the most challenging in Brazil, with extensive debates on its purpose and organisation. This stage was reformed in 2017, when a model with differentiated pathways was introduced, which has been highly problematic in the country. The reform has been evaluated, and a new reform is underway based on the broader debate about the dilemmas and alternatives. Mandatory schooling in Brazil extends to age 17 and thus includes high school for those who can follow a smooth trajectory. From age 18 onwards, individuals still have the right to education and may attend regular high school, specific EJA classes or take sufficiency exams. Table 2 shows that approximately 90% of the population aged 15 to 17 is enrolled in school, but only 76% of these students are actually in high school (INEP, 2024). At this stage, education is predominantly provided through state education networks (83%), with the private sector accounting for 12% of enrolments. Notably, federal schools account for 3% of enrolments. In this context, federal schools are distinguished by their infrastructure and highly qualified teaching staff.

Approximately 30% of the population attends higher education institutions in the expected age group (18 to 24). At this level, the private sector handles the lion's share of education, accounting for 78% of enrolments, while the federal network of free universities accounts for 14% and state universities account for 6%. The federal government supports this sector through scholarship programmes and educational credit programmes. There are also significant affirmative policies that aim to mitigate inequalities, including for Black individuals, Indigenous people, people with special needs and students from public schools. In higher education, beyond problems related to access, ensuring the quality of distance learning remains a major challenge.

Maintaining this robust system of educational provision, which includes 47 million students in basic education and an additional 9.4 million in higher education (INEP, 2023), requires a considerable amount of resources and presents a major challenge for Brazilian education. Although the resources are substantial, they are still insufficient to guarantee universal provision, quality and equity within the system. Funding is anchored within the constitutional framework, with a percentage of tax revenue earmarked for the maintenance and development of education, which is an important mechanism for addressing these challenges.

The country continues to invest 5% of GDP in education (INEP, 2023), reflecting the efforts of all federal entities. The National Education Plan approved in 2014 set an investment target of 10% of GDP to address persistent educational inequalities, but austerity policies combined with the pandemic have prevented this target from being met. In terms of the breakdown of this investment, municipalities are responsible for approximately 45% of education spending, states contribute 34.3% and the federal government accounts for only 22.9%. These contributions result in significant disparities in investment per student across different levels of government.

It is noteworthy that in terms of location, 89% of Brazilian enrolments in basic education are urban, while 11% are in rural areas, which include ethnically and racially diverse populations. Specifically: 1) Indigenous peoples account for 302,000 enrolments, representing 1% of the school population. Indigenous peoples are guaranteed the right to their native languages when accessing education, with specific educational materials and Indigenous teachers provided

for them. Brazil currently has approximately 274 Indigenous languages. 2) Quilombola students (people who are “descendants and remnants of communities made up of people presumed to have Black ancestry, linked to resistance against historical oppression”) make up 278,000 enrolments, or another 1% of the school population. Despite the linguistic diversity of Indigenous peoples, the official and hegemonic language is Portuguese. As such, despite the recognition that Indigenous peoples have the right to preserve their original languages, the country has only one official language.

In terms of diversity, the 2023 School Census shows that there have been advances in access to education for students in Special Education. According to the 2023 School Census (INEP, 2024), the number of people with disabilities enrolled in basic education increased at all stages, from kindergarten to high school. Over the past five years, there has been a 41.6% increase in the enrolment of such students, rising from 1.25 million in 2019 to 1,771,430 in 2023. Of this total, 95% of the population aged 4 to 17 is enrolled in mainstream classes in regular education, bringing us closer to Target 4 of the 2014 National Education Plan (NEP), while only 5% are in special classes or segregated schools. It is worth noting that until the early 2000s, 59% of people with disabilities were enrolled in special schools, most of which were segregated philanthropic schools funded by the state (INEP, 2001).

The educational and social inequality between people with and without disabilities was also highlighted in data from the IBGE (Gomes, 2023). The data indicates that of the 18.6 million people with disabilities in Brazil, an estimated 19.5% are illiterate, compared with 4.1% of the population without disabilities. In addition, 63.3% of people with disabilities over the age of 25 have no education or only incomplete primary education. In contrast, 25.6% of people with disabilities have completed secondary education, while 57.3% of those without disabilities have attained this level of education.

In terms of access to higher education, these indicators are even more concerning. Despite legal advances (Law No. 13.409/2016 and Law No. 12.711/2012, which mandate the reservation of places for people with disabilities in technical courses at the secondary and higher levels at federal educational institutions), students from the Special Education population account for less than 1% of total enrolments (INEP, 2024a).

In terms of income, there are multiple facets to the inequalities within the education system. Some indicators illustrate these disparities: in early childhood education for children aged 0 to 3 years, only 28% of children in the poorest quintile are enrolled, compared with 53% in the richest quintile (INEP, 2024). In terms of access to primary education, which is expected to be completed by age 14, statistics about the number of 16-year-olds who have completed this stage show that 95.5% of young people from the richest 25% of the population have completed it, while only 74.4% of those from the poorest quartile have done so. The most pronounced inequalities are found in secondary education: whereas 90% of young people in the richest quintile have completed secondary school by age 17, only 66% of those in the poorest quintile have attained this level (INEP, 2024).

After this panoramic and predominantly descriptive presentation of Brazilian education today, we will now summarise some of the major challenges that this issue presents for the universalisation of education with quality and inclusion.

3. Brazilian education: problems and challenges

The size of Brazil’s territory and population ensures a rich diversity that coexists with significant challenges in terms of educational inequalities, as indicated in the preview sections. This diversity calls for policies of equity, respect and tolerance that promote the full-fledged development of all individuals. At the same time, these inequalities require actions to overcome both material barriers, such as education funding, and symbolic ones, including intolerance, racism, sexism, ageism and all forms of discrimination. In this context, inclusion is a central issue in Brazilian education, representing a multifaceted and ongoing process that continually poses educational challenges.

Brazil has conducted the discussion on how to address these challenges in a participatory manner. National Education Conferences (CONAE) are one of the key instruments for this. The document from the 2024 CONAE (BRASIL, 2024), which is one of the guiding documents for the creation of the National Education Plan for the next 10 years (2025-2035), provides an important summary of the challenges related to the right to education and aims to ensure that all individuals have access to quality and equity in education.

As explained in the CONAE document, there has been extensive debate about how to ensure that democratic, inclusive and secular public education is provided with social quality across all educational institutions, at every level, stage and modality. To achieve this goal, it is essential to recognise the diversity that defines us in order to guarantee inclusion for all people, including those with disabilities, global developmental delays, high abilities or giftedness, as well as Black individuals, Indigenous populations, quilombolas, people from rural areas, forests, waters and riverside communities, gypsies, immigrants, migrants, stateless people and refugees.

In addition to diversity, Brazil recognises income inequalities, which has led to the inclusion of school attendance as a conditional requirement in minimum income programmes. The multiple aspects of inclusion work to ensure access, retention and learning within public education systems, from early childhood education to postgraduate studies, while addressing dropout rates throughout basic education. Most importantly, these efforts aim to ensure that each school becomes a space of rights that values political-pedagogical projects (PPPs) and school regulations throughout the practice of democratic management and fosters the participation of students and the entire community in the lives of children, adolescents, young adults, adults and the elderly.

In summary, we present the problems and challenges of Brazilian education in terms of access to school, quality learning and prospects after basic education:

- **Guaranteeing the Right to Education: Access and Permanence**

  Access to education, as previously discussed, remains a major challenge, particularly regarding the enrolment of very young children in early childhood education. While

other stages of basic education demonstrate broader and more consistent coverage, which is largely supported by the extensive network of public schools across the country, persistent disparities demand attention. Robust and effective public policies need to be implemented to ensure equitable access, sustained permanence and meaningful learning outcomes for historically marginalised groups.

- **Quality of Basic Education**

  The pursuit of quality learning outcomes in basic education remains a multifaceted and complex debate. Brazil has developed mechanisms to monitor student performance through large-scale assessments, which have highlighted the magnitude of the challenges the country faces. Nonetheless, caution must be exercised when engaging in international comparisons, as indices that overlook the specific cultural and educational contexts risk constructing misleading narratives. Within the Brazilian context, two central challenges emerge: the literacy process during the early years of elementary education and the broader education and training of young people. Addressing these issues is crucial to ensuring opportunities for social integration and preparing individuals for a world characterised by significant transformations in work and sociability.

- **Vocational Education: High School and the Transition to Higher Education**

  A third critical aspect relates to vocational education and the transition from secondary schooling to higher education. Despite the relative robustness of Brazil's basic education system, quality-related challenges persist, and young people's pathways to higher education remain notably constrained. Both vocational and higher education opportunities are insufficient to meet the population's needs. The transition from school to work remains a complex process that poses significant obstacles to the country's ongoing secondary education reforms. These reforms must address the critical task of aligning education with the demands of the labour market and fostering meaningful trajectories for youth.

- **Valuing Education Professionals**

  While the country has made progress in certain areas, such as the establishment of a national minimum wage for teachers, significant challenges remain. These include improving the quality of basic and continuing teacher education, ensuring structured career development and providing adequate working and health conditions for the teaching profession. Addressing these issues is a key priority for the next NEP.

- **Public Funding for Public Education**

  Increasing investment in education as a public policy, underpinned by social accountability, is essential. Ensuring adequate conditions to promote the social quality of education is critical to achieving this goal. Efforts must focus on democratising access, retention and learning outcomes, particularly in contexts historically characterised by inequalities.

- **Protecting Biodiversity, Promoting Sustainable Socio-Environmental Develop-ment and Tackling Inequalities and Poverty**

  Education plays a strategic role in addressing the country's socio-environmental challenges. It serves as a vital public policy for mitigating environmental disasters and climate emergencies, while also making a substantial contribution to reducing inequalities and poverty. Integrating these themes into the educational system is crucial to fostering sustainable and inclusive development.

RUSSIA

1. Overview

Russia's enormous and diverse territory creates unique challenges for the school system. Russia covers 11 time zones and occupies more than 17 million square kilometres, which is about 13% of the land area inhabited by humans. You could fit France into the territory of Russia 26 times or Great Britain 70 times. The country is about 8,000 kilometres long from west to east (one-fifth of the equator's length) and roughly 4,000 kilometres from north to south.

Harsh natural conditions prevail in much of Russia's territory. About 63% of the country's territory is covered with permafrost and about 50% is categorised as land with "unfavourable natural conditions". For example, in Yakutia temperatures can fall below -50°C, while in the south of the country summer temperatures can exceed +40°C.

Population density varies significantly in different parts of the country. For example, a single densely populated area of Moscow, the capital and largest city of Russia, has a population density of 30,500 people per 1 km2, while Chukotka has a population density of 0.7 people per 1 km2. As of 2024, Russia has 16 cities with populations over one million, accounting for a quarter (25.6%) of the total population and a third (34.2%) of the total urban population. Moscow alone is home to more than 13 million people.

The population of Russia is about 146.5 million people. Russia is the ninth most populous country in the world, behind China, India and Brazil. Since 2014, Russia has experienced a steady annual decline in the birth rate, while the share of children aged 5-19 years old has grown during this period and reached 17.8% of the total population by 2023. Since 2015, the rural population has been steadily decreasing (by 3.1%), while the urban population has been increasing (by 1.3%).

Russia's GDP share for 2023 is less than 2% of global GDP, although Russia has the highest GDP per capita among BRICS countries. In 30 regions of Russia, gross regional product (GRP) per capita is higher than the BRICS average.

The differentiation of the country's territory is interconnected with disparities in the well-being of the population. Uneven regional development leads to major differences in income, living standards and access to quality education. In 2023, the Gini index reflecting income differentiation was 40.3 in Russia, which is considered a fairly high level of inequality. For example, the index is 35.7 in India, 46.8 in China, 53.4 in Brazil and 63.0 in South Africa.

Russia is one of the most ethnically diverse countries in the world, with more than 190 nationalities speaking over 155 different languages. Russia is home to representatives of 34 peoples belonging to the Indigenous minorities of the Far North and Far East. Their total number is 181,500 people.

Several major religions are prevalent in Russia, including Orthodoxy (42% of the population), Islam (30%) and Buddhism and Judaism (about 2%), with Islam being the second largest religion after Christianity. Some 3-5% of the population identify themselves as belonging to so-called "minor religions".

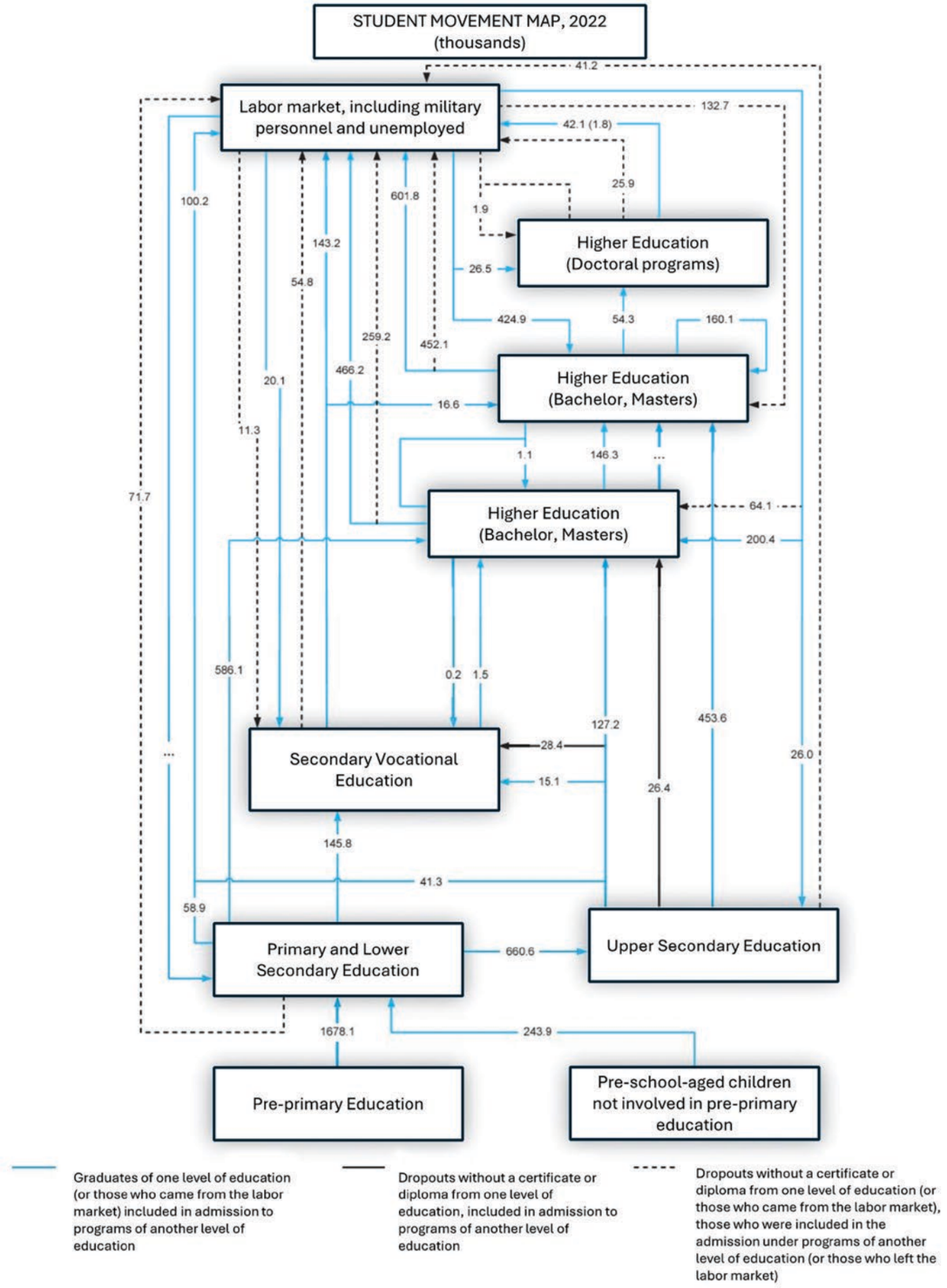


Figure 1 – Diagram of student flows by education level in Russia, 2022

Source: HSE University, "Indicators of Education in the Russian Federation, 2023".

The sheer size of the country, combined with its diverse natural, climatic, social, demographic and economic features, creates a challenging environment for equitable access to education across the country.

2. Key features of the education system

Russia adheres to the principle of **unity of the educational space**, which not only ensures the unimpeded transition of students from level to level, but their free movement between educational organisations of the same level as well, regardless of the location of the organisations and the social status of students.

The unity of the educational space is ensured through the introduction of the federal state educational standards and the establishment of requirements that are mandatory for the implementation of all relevant educational programmes. These documents define unified national requirements for the structure and conditions of educational programmes (and their scope), as well as for the results of mastering such programmes. The unity of the educational space at schools in the Russian Federation is also ensured through the state policy on textbooks and teaching aids. A federal list of textbooks recommended for use is published annually. In addition to federal state educational standards and textbooks, Russia ensures the unity of its educational space through the introduction of unified teacher training standards, model educational programmes for a number of subjects and, starting from 2023, unified educational programmes. Elementary schools have unified programmes for the Russian language, reading and the environment. In secondary school, unified programmes are provided for Russian language and literature, history, social studies and geography. The law does not offer unified programmes for mathematics or physics.

2.1. Structure of education paths in Russia

There were 18 million students in the general education system in the 2023/2024 school year; 98.6% of them study at public schools and 77.6% study at urban schools. There are approximately 38,900 schools in Russia, of which about 2.4% are private. The number of teachers is 1,074,700.

The structure of Russian education is comprised of several levels, from pre-school to higher education. The system aims to ensure continuity and accessibility of education for all age groups.

There are 10 levels of education in Russia.

General Education:

- Pre-school education
- Primary general education
- Basic general education
- General secondary education

Vocational Education:

- Secondary vocational education
- Higher education – bachelor's degree
- Higher education – specialisation or master's degree
- Higher education – postgraduate studies – training of personnel for higher qualifications

Extracurricular Education:

- Extracurricular education for children and adults
- Extracurricular professional education

In Russia, pre-school education is part of the unified general education system. It includes the education of children aged 3 to 7 in kindergartens. In recent years, pre-school education has become an important part of school preparation and includes early development, learning through play and preparation for learning activities. Primary general education covers children aged 6–7 to 10 years (grades 1–4). During this period, the foundations are laid for reading, writing, mathematics and other basic subjects. Basic general education covers children from 11 to 15 years of age (grades 5–9). At this stage, pupils acquire basic knowledge in a wide range of subjects necessary for their general development. At the end of grade 9, they take the State Final Attestation, after which they can continue their studies in higher grades or transfer to colleges (secondary vocational education). Secondary general education covers pupils in grades 10–11 (16–17 years old) and includes in-depth study of a number of subjects. Graduates take the Unified State Examination, which is compulsory for admission to higher education institutions. Secondary general education programmes can be obtained not only in high schools, but also in colleges. Vocational Education and Training (VET) gives students the opportunity to enter colleges and technical schools after grades 9 or 11 to pursue a profession. In VET, students can simultaneously complete general secondary education (if they enter after grade 9) and obtain a specialisation. These programmes provide practical skills in a variety of fields, such as engineering, health care, the arts and more. Total enrolment in general education programmes, which are implemented both at school and at VET organisations, is 91.2%.

After completing secondary general or vocational education, graduates can enrol in higher education institutions (universities). In Russia, higher education is divided into three levels: bachelor's degree (four years), master's degree (two years) and postgraduate studies (for those who wish to pursue a research or teaching career). However, in recent years there has been a growing emphasis on returning to the traditional Russian system of specialisation, where students study at universities for five to six years and receive a full-fledged higher education, which allows them to enter the labour market immediately without needing to complete a master's degree. Specialisation is viewed as a model that is more adapted to national conditions, which allows for training qualified specialists for key sectors of the economy.

2.2. School teachers

The school education system employs 1,054,714 teachers, 86.3% of whom have a higher education and 13% of whom have a secondary vocational education. Teachers have the right to pursue continuing professional education at least once every three years, with funding provided by the budget. To verify their compliance with the requirements of their position, they must undergo attestation every five years. Additionally, teachers may choose to undergo attestation voluntarily to establish a qualification category.

2.3. Funding structure

The Russian education system receives funding from various external sources and income from its own activities (Figure 2). At the same time, budget funds account for the bulk of funding at almost all levels of education. Schools are funded based on norms determined by regional government authorities through subventions to local budgets, including expenditures on labour remuneration and the purchase of textbooks and teaching aids. Remuneration for teachers may not be lower than the level corresponding to the average salary in the respective region. Financial support for building maintenance and school repairs is provided from local budgets.

Consolidated budget expenditures per one schoolchild amounted to RUB 177,500.

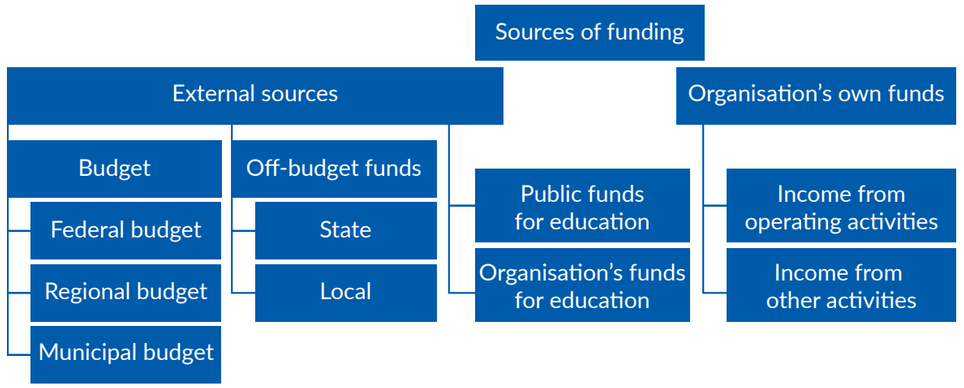


Figure 2 – Funding sources for educational organisations

2.4. Regulatory grounds

The Education Law of the Russian Federation is the primary legal framework regulating educational activities in the country. It addresses a wide range of issues, including the organisation and operation of educational institutions, the rights and responsibilities of stakeholders and quality standards. Key aspects of the law include requirements for educational and moral training programmes and the provision of educational services. It also defines the roles of the federal, regional and local authorities in managing the education system.

The country's linguistic, ethnic, religious, territorial and socio-economic diversity makes it crucial to consider the interests of different population groups when shaping the national educational policy. The Constitution of the Russian Federation guarantees every citizen of Russia the right to education:

- "The general accessibility and free accessibility of pre-school, basic general and secondary vocational education at state or municipal educational institutions and enterprises shall be guaranteed"
- The right of everyone "to receive higher education on a competitive basis free of charge at a state or municipal educational institution or at an enterprise" is asserted

- Basic general education is compulsory. “Parents or persons in loco parentis shall ensure that children receive basic general education”

All nationalities have general equal rights to education. State educational policy aims to support national minorities (although there is no such legal status in the Russian Federation) through:

- The right to study one’s native language and receive education in one’s native language
- The right to disseminate knowledge of one’s native language, national culture and history
- The right of national minorities to establish their own educational institutions

It is currently possible to study or receive education in 83 languages of the peoples of the Russian Federation. According to state statistics for 2016, 54 languages other than Russian are taught in Russian schools, and 69 national languages are studied as an independent subject. In total, about 300,000 people studied in a non-Russian language in the 2016/17 academic year. More than 1.5 million schoolchildren studied national languages as an independent subject.

Russia’s education system allows for the development of individualised curricula in regions with significant ethnic minority populations, such as the republics of the Caucasus, Tatarstan and Bashkortostan, where schools emphasise teaching local history, traditions and languages alongside the national curriculum. In such republics, schools often provide opportunities for instruction in both Russian and local ethnic languages in an effort to foster cultural identity. Among all pupils, 173,500 children are taught in 16 native languages, which is about 1% of all pupils, while another 11% of pupils study their native language in separate subjects or as an elective subject.

With such a scale and high level of heterogeneity, the issue of social consolidation becomes an important challenge, and the school system acts as a link. The complexity of this context makes it an important challenge for the education system to maintain integrity, unity and identity. In this regard, it is crucial for the government to provide greater attention to the education system. School is becoming one of the main providers of education. According to data for 2023 more than half of volunteers in Russia are under 18 years old, every third organiser of volunteer actions is a school and every tenth school organises volunteer actions.

The Education Law of the Russian Federation distributes the powers and management functions in matters concerning education (Figure 3).

Federal	Development and implementation of a unified state policy Organisation of the provision of higher and continuing professional education Creation, reorganisation and liquidation of federal state educational organisations Approval of federal state educational standards, etc.
Regional	State control over the activities of organisations Provision of secondary vocational education Advanced training of teachers Funding of state obligations for education in non-state schools Licensing and accreditation of regional and municipal educational institutions, etc.
Municipal	Provision of free pre-school, school and additional education for children Development of infrastructure for these levels of education Registration of children subject to education in educational programmes of pre-school, primary, basic and secondary general education, assignment of municipal educational organisations to specific territories of a municipal district, etc.
Organisational	Approval of educational programmes Ensuring support for children and the educational and upbringing process Establishment of rules and standards for the remuneration of workers Provision of additional educational paid services, etc.

Figure 3 – Powers of management bodies at different levels

Municipalities are responsible for providing free pre-school, school and extracurricular education for children, while the state is responsible for funding these types of education. Municipalities keep records of all children on their territory. This ensures constitutional guarantees of the right to free general (school) education. Municipalities are obliged to maintain and often develop the infrastructure of these levels of education. The state (federal and regional levels of government) and private capital have the right to co-fund the relevant infrastructure programmes. At the same time, the regional authorities fund salaries in schools and kindergartens as well as educational expenses, including textbooks, by sending appropriate subventions to educational organisations. Currently in Russia, municipalities are the founders, i.e., property owners, of the majority of pre-school, school and extracurricular educational institutions for children. The state authorities (both federal and regional) ensure the implementation of basic and extracurricular educational programmes as part of the federal state educational standards.

The regional authorities are also responsible for providing secondary vocational education, ensuring the professional development of teachers at schools, kindergartens and secondary vocational education organisations and funding state obligations to educate children at non-state schools. The regional authorities also license and accredit regional and municipal educational organisations (kindergartens, schools, vocational colleges and schools, universities and extracurricular education organisations).

At the federal level, the state develops and implements education policy (tasks that are mandatory for all levels and types of government) and launches federal target programmes in education. The government ensures that citizens have the right to free higher education on a one-time competitive basis. While higher education in Russia is not universally free, the state allocates a certain number of publicly funded university places. These are awarded based on performance in the Unified State Exam, which serves as the primary selection criterion.

At the same time, there are still a small number of secondary vocational education organisations with municipal and federal subordination, there are regional and even several municipal higher education institutions and schools can be transferred to the regional authorities.

Educational organisations independently approve their educational programmes, provide care and supervision of children, and carry out education and upbringing in accordance with the federal state educational standards and taking into account exemplary educational programmes developed at the federal level. Educational organisations choose the rules and norms of remuneration for their employees (remuneration

systems) from among those proposed by the regional level of government. Educational organisations have the right to provide additional paid educational services. No paid educational programmes or paid services at educational organisations may be made in lieu of state educational programmes or services in accordance with Russian legislation.

3. Diversity of the system and contexts

3.1. Regional diversity

Russia is divided into 89 regions, each with its own geographical, economic and socio-demographic features. Russia's regions vary in their level of economic development. Some regions, especially those rich in natural resources such as oil and gas (e.g., Yamal), have a high level of economic prosperity with GRP per capita of RUB 10.5 million. In contrast, regions with "less valuable" natural resources, less profitable manufacturing and mining, and a relatively low level of industrial development, such as the North Caucasus, have to deal with a lack of investment in the economy and have a much lower GRP per capita of RUB 305,000.

The disparity in Russia's regions is also reflected in the education system. For example, in the Magadan and Kirov Region, the share of school buildings requiring major repairs exceeds 60%, while in the resource-rich Tyumen Oblast this share is below 3%. The Republics of Dagestan and Tyva and the Jewish Autonomous Region, all of which have natural and climatic challenges and mountainous terrain, have the highest share of schools (1.5%-3%) without any Internet connection, while half of the country's regions do not have any schools without Internet.

3.2. Rural and urban contexts

Socio-demographic processes associated with the outflow of the population from rural areas aggravate the problems of these areas and, consequently, of rural schools. In addition to these conditions, rural areas often face the problem of long distances between settlements and hard-to-reach areas. Over the past 20 years, Russia has implemented a policy of optimising the network of rural schools in an effort to improve their financial efficiency. Small schools, which are more common in rural areas, are usually merged into one single school to improve management efficiency and receive more resources overall, which makes it necessary to transport schoolchildren from nearby villages to the primary school. This policy has led to a near doubling of the number of rural schools in 20 years.

In remote and sparsely populated areas of Siberia and the Far North, the education system has been adapted to serve students from nomadic communities, such as the Nenets and Evenks, through the establishment of special nomadic schools. Such schools take into account the nomadic lifestyle of Indigenous peoples, ensuring that children receive an education without abandoning their traditional way of life.

The problem of geographical accessibility is particularly acute in rural areas with relatively lower population density and long distances. Rural areas generally have more limited access to basic infrastructure, such as roads, transportation and high-quality social and cultural services. In Russia, about a quarter of the population lives in rural areas, more than half (55.7%) of all schools are located in rural areas and less than a quarter of all schoolchildren (22.4%) study at such schools.

Although about 4.7% of rural schools in the country are not equipped with warm toilets, 5.7% of rural schools do not have central heating and 4.3% of rural schools do not have running water2, less than 5% of urban schools face such challenges. Even though most large cities and many towns have the most modern architecture and materials, nearly 15% of rural school buildings are still wooden (only 2.7% in urban areas), while in some regions more than two-thirds of schools are still made of wood.

Regional disproportions are also reflected in rural schools. For example, in the Tyumen and Tambov Region, the average size of schools exceeds 600 students, which is almost the national average size of urban schools. Another example is the Chechen Republic and the Republic of Ingushetia. Due to high birth rates, the rural schools in these regions have high occupancy rates, so more than one-third of all school students in these regions attend classes in the second shift. The complete opposite in this sense is Rural schools in the Magadan Region have the complete opposite issue: here the average number of students is the lowest in the country at around 25.

3.3. Ethnic minorities

Among Russia's regions, there are 22 national republics with distinct ethnic minorities that have their own languages and cultural traditions. The main ethnic groups include Russians (about 80% of the population), Tatars, Bashkirs, Chuvash, Chechens and many others. In some regions, such as the Republics of Tatarstan and Bashkortostan, ethnic minorities make up a significant proportion of the population and their languages are often official alongside Russian.

According to data from the 2020 All-Russian Population Census, representatives of 34 peoples belonging to the Indigenous minorities of the Far North and Far East live in the Arctic and Far East. Their total number is 181,500 people. The largest groups are the Nenets, Evenks and Evens. The proportion of school-age children among the Indigenous population is high at 42.7%.

3.4. Household diversity

As of the end of the second quarter of 2022, the richest 10% of Russians accounted for 30% of the population's cash income, while only 2% of total income was concentrated among the poorest 10% of the country's residents. The socio-economic gap is particularly pronounced between urban and rural areas. Among the country's poorest residents, 48% live in urban areas, while 52.2% live in rural areas according to 2020 data (Federal State Statistics Service).

Wealthier families have access to individually tailored educational opportunities that poorer families cannot afford. The gross expenditures of families on education for children ranging from one and a half to 24 years old in the 2021/22 academic year amounted to more than RUB 2.1 trillion, an amount commensurate with about half of total budget expenditures on education. Most of the expenditures are on extracurricular education, of which one third goes to pay for tutors and private teachers. Family budgets for all components of schoolchildren's education also depend on their material status. Overall education expenditures per child in the least wealthy families are significantly lower than in wealthy families: this figure is just over 41% for families with schoolchildren (Schugal & Bondarenko, 2023). Differences in family wealth are also reflected in the academic results of schoolchildren: students in well-off families are likely to be twice as successful as students in families with low socio-economic status.[3]

2 Ministry of Education of the Russian Federation: https://docs.edu.gov.ru/document/a6e98b2a47dcfc2d6d0f9472c7318873/

3 HSE University, MEMO, 2021

4. Key challenges

4.1. School demography

Socio-demographic issues have largely shaped one of the major problems of Russian education: since 2013, the number of school-age children (5-19 years old) has been on the rise. Demographic forecasts project this growth will continue until 2026. The suboptimal structure of the school network resulted in roughly 2,700 schoolchildren (14.9% of the total number) studying in the second shift of double-shift schools during the 2023/2024 school year. Moreover, third shifts were only eliminated following the 2022/2023 school year. Even though the problem of shifts is still relevant and needs to be solved, the demographic forecast is of concern, since the population is expected to decrease by more than 400,000 people per year by 2032 and by a total of 8 million people by 2046. From 2026 onwards, there are three forecasts for the annual decline in the number of children and young people (Figure 4). With the potential decline in enrolment, the challenge is to calculate the optimal level of new school places and staffing to meet current needs, given the impending decline in demand.

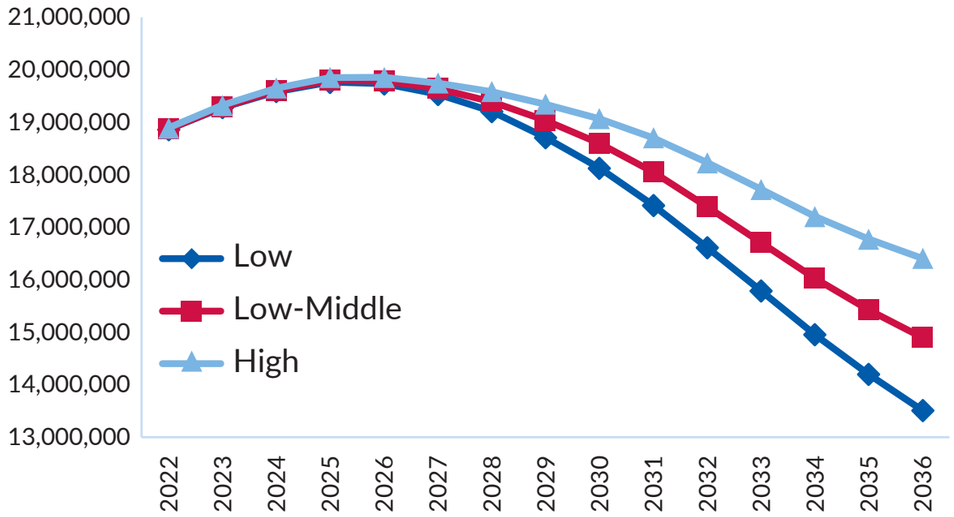


Figure 4 – Forecast of the number of school-age children and young people according to the three forecasts

Source: Federal State Statistics Service.

Since 2018, the total population in Russia has been declining against the backdrop of lower birth rates and natural population decline. From 2009 to 2017, the total population grew due to migration inflow, but in 2023, geopolitical events and a tougher migration policy inside the country resulted in the lowest inflow of migrants since 2013 at around 560,400 people, which is 23% lower than in 2022. To maintain the current population size, the migration inflow from abroad would need to remain at around 390,000 people per year. A high level of migration inflow means that migrants and their children need to integrate into Russian society, and schools should play a significant role in this matter.

4.2. Shortage of personnel and workload

Personnel shortages present a major challenge for Russian education. On average, 3%[4] of teacher positions are unfilled across the country, but the share of such positions varies by region. For example, about 10-11% of teacher positions were unfilled in the Republics of Kabardino-Balkaria, Yakutia and Mordovia in 2023. In 14 regions, the figure is below 1%. From 2018 to 2023, the share of unfilled positions in Chukotka and Sakhalin increased by 10-12%. The greatest shortage is among teachers of mathematics, chemistry, physics, computer science and foreign languages. There also continues to be a lack of specialised teachers, such as speech therapists, disability specialists, social pedagogues and tutors. About 40% of schools have open teaching vacancies[5].

The ageing of personnel also remains a challenge. As of 2023, teachers over the age of 60 accounted for 15.5% of all teachers in the country, while the share of staff under 35 was 23.0%.

4.3. Educational infrastructure

Infrastructural challenges create problems with the heterogeneous resource endowment of schools. In addition to such issues as capital repairs, accident rates and the availability of basic utilities described in the clause 3.2 above, it is crucial to pay attention to the heterogeneity of schools' digital infrastructure. The availability and distribution of digital resources in schools is particularly striking given the challenge of digitalisation, which is significant both for Russian education and for society as whole. On average across the country, the provision of schools with digital infrastructure is not a cause for concern, since more than 75% of school buildings are equipped with Internet at speeds above 30 mbps, and on average there are 16 students per computer with Internet access that are available for study in their free time[6]. But the situation is not uniform by region – the indicator varies from 4 to 37.

The current national education policy addresses a number of challenges that arise from the country's complex and diverse context. Nevertheless, there are still challenges that the current policy has not yet addressed, which now require additional attention. The Russian education system has devoted increasing attention to the challenges that the current educational policy has not yet been able to fully address. The authorities' control over the upbringing and socialisation of young people is becoming a key focus that is being addressed through extracurricular activities, patriotic education, local history, the introduction of educational advisors and initiatives, such as "Conversations about Important Things". At the same time, there is still a low level of individualisation in the educational process, insufficient diversity of learning formats and obsolescence of educational content. This is due to problems associated with the training and professional development of teachers, as well as flaws in the system of education quality assessment.

Social inequality and territorial disparities remain acute issues, which attempts are being made to overcome through the unification of educational content, centralisation of management, modernisation of infrastructure and development of a digital educational environment. However, the education system must adapt to new challenges related to labour market demands and technological changes, which requires the expansion of STEM education, active digitalisation and career guidance.

4 Ministry of Education, Federal statistical observation forms OO-1, 2023-2024 year

5 Ibid.

6 Ministry of Education, Federal statistical observation forms OO-2, 2023-2024 year

INDIA

1. Understanding India: A Timeline

India, officially the Republic of India, is a country in South Asia. It is the seventh-largest country by area and is home to 17.78% of the world's population. The current population of India is 1,458,835,700. The country has 28 states and eight union territories. India is a country with rich heritage dating back to one of the world's oldest civilisations – Indus Valley around 2600 BCE.

After coming of age and transitioning through worthy historical milestones, it has attained a position of prominence around the world. Over this period, the multiple systems of political governance with distinct ideological strands has continually altered the social fabric of the country. People have come to India from different parts of the world with a gamut of purposes, ranging from education to plundering to governance to trade. This has resulted in cultural upheaval with intersectionality across the local people of India and those who came from outside the country. This phenomenon has had an impact on India's geopolitical position of India. The country's total land area and borders have been redefined significantly across this timeline. This has regulated the relationship between the state and its people and their expectations from each other from time to time. The present-day diversity within India is drawn from its historical passage and is full of socio-cultural diversity along with physical features such as geographical context.

2. Diverse landscape

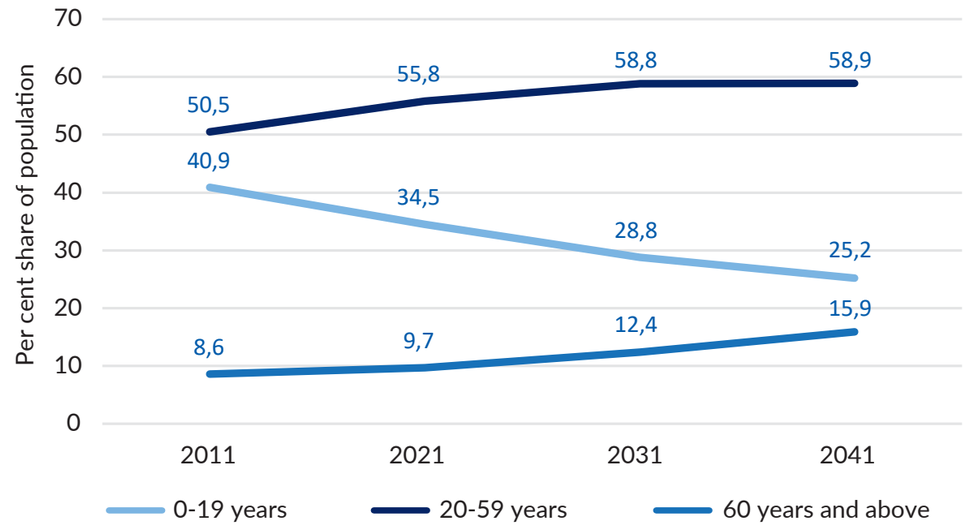
Geographical context:

India is home to seven distinct mountain ranges: the Greater Himalaya Range, the Middle Himalaya Range, the Outer Himalaya Range, the Karakoram Range, the Western Ghats, the Eastern Ghats and the Aravalli Range; a long coastline (7,516.6 km, including 2,094 km of island territories and 5,422 km of mainland coastline); multiple rivers that connect mountains and sea zones; three distinct deserts: the Ladakh desert and the Spiti desert, the Trans-Himalayan cold desert; the White Salt Desert of Kutch; and the Golden Sandy Thar Desert. Despite its diverse geography, India operates under a single time zone.

Population demography

India is the most populous nation in the world with an estimated population of 1,458,553,561 people, of which approximately 48.5% are female. India will be the youngest nation across the globe by 2030. Graph 1 presents the population projections in different age groups from 2011 to 2041. With an estimated decline in the total fertility rate from 3.1 in 2001 to 1.7 in 2041, the annual population growth rate is predicted to decline from 1.77 (2001-2011) to 0.46 (2031-41).

I wish to acknowledge the support of doctoral research students, (in alphabetical order), Ms. Anju Saxena, Ms. Asha and Ms. Bhawna in preparing this document.



Graph 1 – Population by age structure (percentage of population) for India 2011–2041

The majority of the population in India (more than 60%) lives in rural areas (villages and agricultural lands). According to a World Bank report (2023), the urban population in India has doubled from 18% in 1960 to 36% in 2023.

As cited in the Economic Survey 2023-2024, more than 40% of India's population is expected to live in urban areas by 2030. This estimate is based on studies and reports by NITI Aayog. There is migration in all directions, both rural and urban. The following table depicts migration trends based on the Periodic Labour Force Survey (PLFS) conducted by the Ministry of Statistics and Programme Implementation (MoSPI) from July 2020 to June 2021.

All India	Rural to rural	Urban to rural	Rural to urban	Urban to urban	All
Persons	55.0	10.2	18.9	15.9	100.0

Table 1 – Migration Trends in India

Source: Reproduced from Economic Survey of Rural-Urban Population" by the Indian Ministry of Statistics and Programme Implementation, 2024, PIB Delhi.

Tribal communities live in about 15% of the country's areas in various ecological and geo-climatic conditions ranging from plains to forests, hills and inaccessible areas. There are over 500 tribes (with many overlapping communities in more than one state). The tribal communities are culturally diverse with a complex language matrix and are in different phases of social, economic and educational development.

Multicultural society:

Each state in India has a distinct cultural profile. This is reflected through variations in language, food, costumes and festivals. Each region has unique climate conditions as well. Local agricultural produce and spices along with numerous forms of cooking are a major part of Indian cuisine. Costumes vary based on climate and are typically made from a variety of fabrics produced in different parts of India. Various harvest, regional and religious festivals are celebrated throughout the year.

The Eighth Schedule of the Indian Constitution lists the languages that are recognised by the government. As of 2022, the schedule included 22 Indian languages. Adding English to these 22 languages, there are a total of 23 official languages of India. As per the 2011 census, India has about 19,569 languages and dialects, of which almost 1,369 are considered dialects and 121 are recognised as languages.

According to the Constitution, India is a secular state. Articles 25–28 of the Constitution grant the right to freedom of religion to all citizens. Hinduism is followed by nearly 79.8% of the population, Islam by 14.2%, Christianity by 2.3%, Sikhism by 1.7%, Buddhism by 0.7%, and Jainism, Zoroastrianism, Judaism and other religions by 0.4%.

India is a multiethnic society with complex intersectionality across diverse cultures, languages, race and regions. As such, it would be inappropriate to categorise this vast multidimensional spectrum of communities in India into prevailing categories of ethnic identities which are mostly based on either a singular criterion or a combination of few.

3. Key features of the education system

The NEP 2020 has proposed a new curricular and pedagogical structure for school education. So, both the terms middle and upper primary (previous) are used for grades 1–8 in the school. This intersectionality across such diverse contexts has consequences for the quality of education in India. At present, education is on a concurrent list (joint responsibility of Union and State government) in the Constitution of India. The policies formulated by the Union government are applicable in every state and Union territory (UT). To regulate the quality of education, there are dedicated national-level statutory bodies that officially provide recognition to educational institutions. These include school boards like the Central Board of Secondary Education (CBSE) and programme-specific bodies for higher education such as the University Grants Commission (UGC) for recognising universities, as well as the National Council for Teacher Education (NCTE) and the All India Council for Technical Education (AICTE) for engineering programmes. To maintain parity, these statutory bodies also develop norms, standards and model curricula that each institution has to abide by.

For school education, a national-level body, the National Council of Educational Research and Training (NCERT) prepares the model curriculum and textbooks. The curriculum developed by the NCERT serves as a model curriculum for India's States. The public schools run by the Union government all over the country follow the curriculum structure and the textbooks prepared by the NCERT. However, the States have autonomy to prepare their own curriculum and assessment procedures. Many States continue to use the textbooks developed by the NCERT and translate them into local languages. There are a few State governments which have developed their own textbooks. Each State has a specific body called the State Council of Educational Research and Training (SCERT), which can formulate the curriculum framework for state-funded schools and also prepare textbooks that are more specific to the State's historical and cultural context. The States can also prepare textbooks in local languages. The State textbooks can include examples from local geographical, cultural and linguistic contexts.

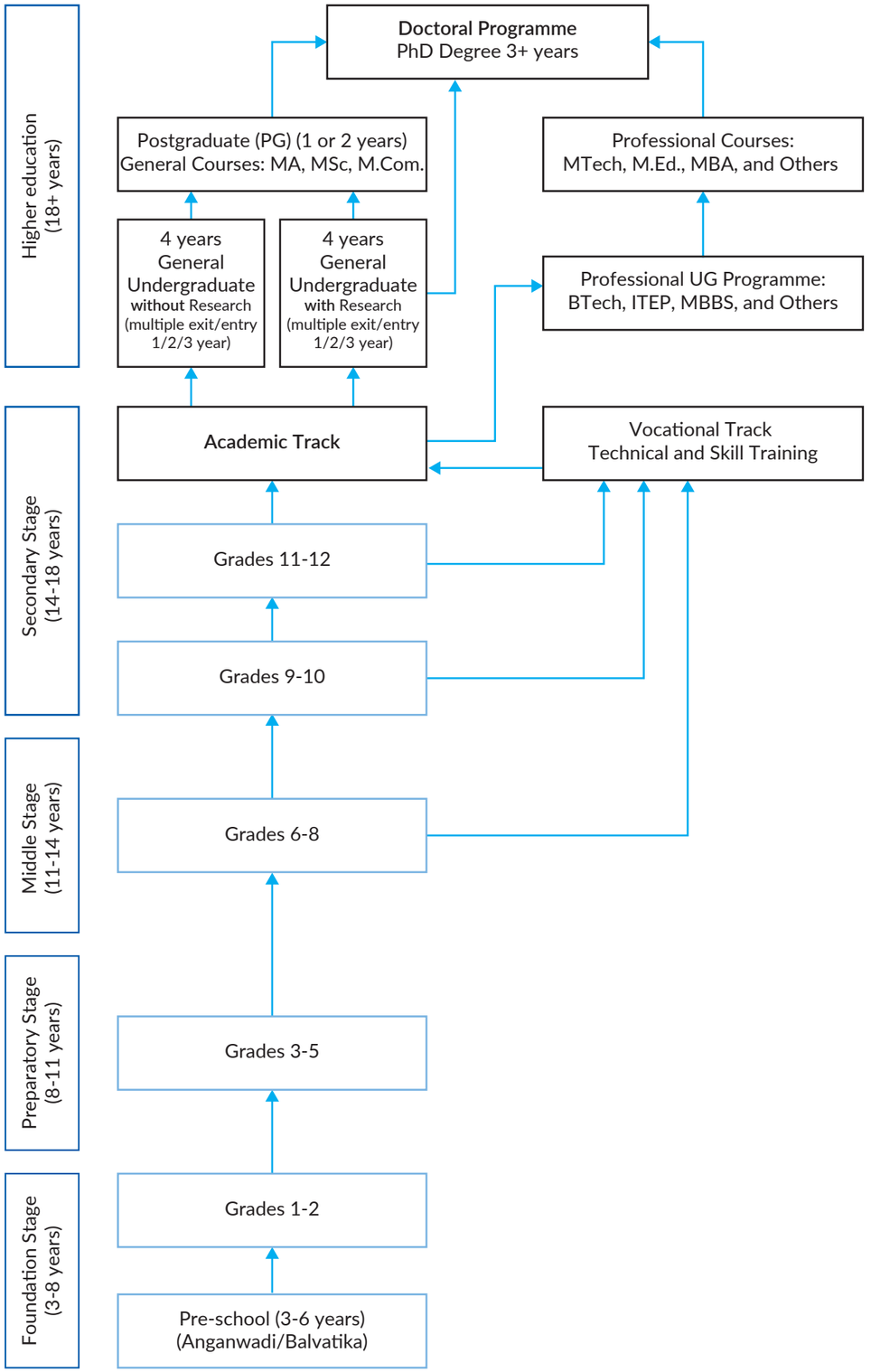


Figure 1 – Structure of education in India

In India, schools can be public or private. A public school means that either the Union or the State government is funding the school. These schools provide free education until grade twelve. The economic liberalisation that India initiated in 1991 has also impacted education. Since that time, there has been a gradual increase in the number of private educational institutions at every stage, although mostly in urban areas. The private schools charge fees (low or high) and usually offer English as the main language of instruction.

School education across diverse contexts in India

The structure of education in India has been redefined by the National Education Policy 2020. The following figure describes the various stages of school and higher education with multiple tracks across general, vocational and professional education.

Educational funding

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), in a concerted effort to boost education in the country, India consistently allocated between 4.1% and 4.6% of its GDP for education from 2015 to 2024, adhering to the international guidelines set by the 'Education 2030 Framework for Action'. Recent reports from the UNESCO Institute for Statistics on global education funding indicate that the Indian government's spending on education ranged from 13.5% to 17.2% of its total public expenditures during the same timeframe (Kumar, 2024).

Both the Union and the State governments have budget allocations each financial year to boost the quality of education in public schools. Another source of funding is a specific tax called the education cess, which is levied on the basic tax liability of an individual, company, or organisation. This system was introduced in 2004 and the percentage of this tax is determined in annual budgets. The money generated in this manner is used to fund expenses such as midday meals, the opening of new public schools and colleges, educational loans to students from low-income group, salaries and other specific plans. Private schools are run through educational trusts/societies. These institutions can work in philanthropic or self-financing mode. These schools charge fees that may be low or high depending on the school management. The private schools that operate as part of Corporate Social Responsibilities usually provide scholarships for students with excellent grades from economically weaker groups.

Number of schools

The total number of schools in India marginally declined in 2023-2024 to 1,471,891 from 1,551,000 in 2018-2019. Most of the schools are run by State governments. In the 2023-2024 academic year, such schools accounted for almost 69% (1,015,504 of 1,471,891) of the total number of schools. In 2023-2024, the number of private schools increased to 331,108 from 326,228 in 2018-2019. The number of schools in rural areas declined from 1,304,715 in 2018-2019 to 1,211,993 in 2023-2024. The number of primary schools (grades 1-5) decreased from 826,982 in 2018-2019 to 73,661 in 2023-2024. However, there was an increase in the number of upper primary schools from 300,490 in 2018-2019 to 432,416 in 2023-2024. Similarly, the number of schools at the higher secondary level had almost tripled (from 130,022 in 2018-2019 to 302,864 in 2023-2024). The changes in the number of schools can be attributed to the shifting proportions of school-age children across different stages of schooling.

Number of teachers

There has been an increase in the number of teachers in the period following the approval of the National Education Policy (NEP). The total number of teachers increased from 9,430,839 in 2018-2019 to 9,807,600 in 2023-2024. Of this total number, almost 51% of teachers teach at state-run schools. The number of female teachers also increased from 50% in 2018-2019 to 53% in 2023-2024. The number of teachers in Union government-run schools increased to 67,796 in 2023-2024 from 60,182 in 2018-2019. In 2023-2024, public schools had a total of 50,376,71 teachers, whereas private schools employed 3,730,047 teachers. The government runs 77.5% of the overall schools, whereas only 51% of the total number of teachers work at government schools. It is crucial to note that number of teachers working at public schools is very skewed compared with those working at public schools.

Number of school-age children and GER

The total number of school-age children has declined over the last five years from 57,03,36,600 in 2018-2019 to 36,53,13,810 in 2023-2024. This decline can be seen across all stages of schooling (preparatory from 118,748,600 to 69,988,810; middle from 73,245,200 to 70,503,793; and secondary from 100,725,800 to 96,244,147). Despite the declining number of school-age children, the gross enrolment ratio (GER) has improved across all stages. The biggest observation is that students are progressing and staying in school until the higher secondary level. The overall GER of the secondary stage improved from 50.1 to 66.5 in the post-NEP 2020 years. The retention of boys at higher secondary institutions increased to 74% in the post-NEP 2020 period compared with 57% in 2018-2019. In 2018-2019, the GER of boys at the higher secondary level dropped to 49.5 from 87 at the upper primary level, whereas in 2023-2024 the GER of boys was 65.3 at the higher secondary level compared with 88.8 at the upper primary level. The GER of girls increased to 67.7 in 2023-2024 from 50.8 in 2018-2019. This reflects the impact of affirmative action taken as part of the NEP 2020.

Dropout rate

The overall dropout rate declined significantly from the year 2018-2019 (primary – 4.45; middle – 4.68 and secondary – 17.9) to the year 2023-2024 (primary – 3.7; middle – 5.2; and secondary – 10.9). The slight increase in the dropout rate at the upper primary level can be contributed to the years of the COVID-19 pandemic.

Dropout rates									
Level	Primary			Upper Primary			Secondary		
Year	Girls	Boys	Overall	Girls	Boys	Overall	Girls	Boys	Overall
2018–2019	4.3	4.59	4.45	5.14	4.26	4.68	17.05	18.68	17.9
2023–2024	3.5	3.9	3.7	5.3	5.2	5.2	9.4	12.3	10.9

Table 2 – Dropout rate

Source: UDISE+ 2018-19, UDISE+2023-24

State per capita income and GER

As indicated above, most schools (and thus the number of students) are affiliated with the state board. This means that the infrastructure and other resources of schools, including the number of teachers, are based on the funds allocated by the State government for school education. In addition, while access to education has been ensured since the implementation of the Right to Free and Compulsory Education 2009, the economic well-being of the people in the state directly impacts the process of retention and progression and eventually the school dropout rate. The GER data shows that the dropout rates are higher in states with low per capita income. The table below presents data from two states, one with high per capita income and another with low per capita income. It shows that the overall GER declined in 2023-2024 compared with 2018-2019, although the GER in higher secondary education has improved significantly. The decrease in GER is attributable to population trends and the years of the COVID-19 pandemic. However, the higher retention rate in higher secondary education is directly related to various steps taken during the implementation of the NEP 2020. The overall GER at the higher secondary level increased from 57 in 2018-2019 to 74 in 2023-2024; the GER of States with high per capita income increased from 63 in 2018-2019 to 84 in 2023-2024; and even the GER of States with low per capita income increased from 34 in 2018-2019 to 55 in 2023-2024.

Per-Cfpita Income (INR)		Reference Year	Gross Enrolment Ratio (GER) — All Social Groups		
			Till Grade 5	Till Grade 8	Till Grade 12
India	125,946	2018–19	Primary 101.3	Upper Primary 87.7	Higher Secondary 50.1
	184,205	2023–24	Preparatory 96.5	Middle 89.5	Secondary 66.5
Sikkim	375,773	2018–19	Primary 96.5	Upper Primary 91.1	Higher Secondary 57.6
	587,743	2023–24	Preparatory 95.3	Middle 78.0	Secondary 65.2
Bihar	40,715	2018–19	Primary 93.1	Upper Primary 88.4	Higher Secondary 26.4
	60,337	2023–24	Preparatory 95.9	Middle 68.4	Secondary 37.8

Table 3 – Per capita income and GER

Source: The GER for 2018-2019 was retrieved from UDISE + 2018 – 2019 https://dashboard.udiseplus.gov.in/udiseplus-rchive/#/reportDashboard/sReport. The GER for 2023-2024 was retrieved from UDISE + 2023-24 (NEP) https://dashboard.udiseplus.gov.in/. Per capita income of India and its states was retrieved from the Niti Ayog's key indicators: Socio-economic report https://iced.niti.gov.in/economy-and-demography/key-economic-indicators/socio-economic

Social diversity and student enrolment

As noted, India's social fabric is complex due to the shared culture across the timeline. Social diversity influences the process of the continuation and quality of education. This section focuses on the social context and the position of individuals therein. It addresses three diverse milieus that are important to comprehending the process of school education. The three contexts are Urban and Rural; Gender; and Tribal.

Rural-urban context

As cited in the latest Economic Survey 2023-2024, more than 40% of India's population is expected to live in urban areas by 2030. While it is important to study the push factors behind this rural flight (rural to urban migration), a comparative analysis of the number of schools and number of students enrolled in both these contexts is critical. At present, with about 64% of the population residing in rural India, the number of schools and student enrolment levels is obviously higher at rural schools. However, the number of students per school in urban areas is more than double that of students per school in rural area (135 and 295 in 2018-2019; 142 and 300 in 2020-2021; and 145 and 300 in 2021-2022). The decrease in the GER from primary to higher secondary schools, as noted above, is similar in both rural and urban contexts. Notably, the percentage of students' retention and progression from primary to higher secondary is more than twice as high in urban areas compared with rural areas (16% and 35% in 2018-2019; 17% and 37% in 2020-2021; and 18% and 39% in 2021-2022).

Tribal context

The GER at the primary stage is virtually the same (110.1 in 2018-2019; 106.7 in 2020-2021; and 106.5 in 2021-2022). Unlike the other populations, the trend of a high GER continues through the upper-primary stage as well (96.2 in 2018-2019; 95.8 in 2020-2021; and 98 in 2021-2022). The GER decreased by more than 50% at higher secondary stage (43.9 in 2018-2019; 45.2 in 2020-2021; and 52 in 2021-2022). The GER of girls is marginally higher than that of boys at almost every stage in each of the reference years. There was a substantial increase in enrolments at the higher secondary level in 2023-2024 compared with 2018-2019: boys from 43.5 to 61; girls from 44.4 to 65.1; and the total number of students from 43.9 to 63. This reflects the proactive actions taken as part of the NEP 2020 for children's education in the tribal context.

Gender

Gender is understood in its binary form here with data available for boys and girls. As shown in Table 4, the GER of girls is higher than that of boys at every stage of schooling. This is represented by the Gender Parity Index, yet another significant indicator that explains the transition and retention of girls in school education at different stages.

India	Gender Parity Index (GPI) of GER			
	2018–19	2020–21	2021–22	2023–24
Primary (1–5)	1.01	1.02	1.03	1.03
Upper Primary (Middle 6–8)	1.02	1.01	1	1.02
Higher Secondary (11–12)	1.03	1.03	1.02	1.04

Table 4 – Gender Parity Index (GPI)* of the GER by level of school education

Source: UDISE+ 2018-2019, UDISE+2020-2021, UDISE+ 2021-2022; UDISE 2023-2024[7]

[7] *According to the Ministry of Education and the Department of School Education and Literacy (UDISE+, 2021-2022), the GPI is calculated as the ratio of GER of girls to that of boys. It measures the progress towards gender parity in education and/or learning opportunities available for girls in relation to those available to boys. It also represents the level of girls' empowerment in society. In other words, the GPI of the GER shows whether the representation of females in school education is in line with the representation of girls in the population of the corresponding age group. A GPI with a value of 1 or more shows that the GPI is favourable for girls, while a GPI of less than 1 shows that girls are relatively underrepresented in that specific level of school education.

Student diversity: CWSN

As per the Unified District Information System for Education (UDISE), the enrolment of Children with Special Needs (CWSN) amounted to 0.89% of the total enrolment of children in 2021-2022. The total number of CWSN enrolled in schools at the three different stages marginally increased over three years (21, 11 and 497 in 2018-2019; 21, 69 and 130 in 2020-2021; and 22, 40 and 356 in 2021-2022). At each stage, the number of girls enrolled with disabilities is substantially lower than that of boys. In addition, there was an increase in the number of teachers trained to teach CWSN, with more female teachers compared with male teachers. There has been a concentrated focus on inclusive schools, so the number of special schools declined from 12,380 in 2019 to 5,235 in 2021 to 2,444 in 2022, with primary schools accounting for about 87% of this number. The 2023-2024 data shows the percentage of schools with CWSN friendly toilets (34.4%) and schools that have ramps with handrails (52.3%). This signifies the government's intention to effectively address issues related to the education of CWSN. The enrolment of CWSN in higher secondary education nearly doubled from 247,788 in 2018-2019 to 404,592 in 2023-2024. The transition rate also increased from 38% to 61% from the upper primary to higher secondary levels in 2023-2024. The positive impact of different measures that were planned and executed as part of the NEP 2020 are quite evident in this context.

Vocational education

The number of secondary and higher secondary schools that have vocational courses under the National Skill Qualification Framework (NSQF) and the enrolment of students in vocational courses almost doubled from 2019 to 2022, but is still only offered in a miniscule percentage of just 11% of total public schools: 0.3% of government-funded schools and no private or other schools. While more schools are required to offer the vocational track, it is crucial to address the mindset of people who associate vocational education with a low social status. There was a nominal increase in the number of schools offering vocational education from 280,626 in 2018-2019 to 302,864 in 2023-2024.

Information and communication technologies (ICT) in education

Over the last few years, there has been a huge focus on using technology as an integral part of teaching in every school subject. Such technologies require resources and the allocation of the corresponding funds. The number of schools with functional computers increased from 33% of total schools in 2018-2019 to 45% in 2021-2022. The 2023-2024 report offers different details about the efficacy of schools with specific reference to ICT. According to the UDISE report for 2023-24, there were 256,392 schools with an internet facility; 275,857 schools with functional tablets; 119,765 schools that have PCs with functional integrated teaching learning devices; 359,457 schools with functional smart classrooms; 356,819 schools with functional mobile phones used for teaching purposes; 110,877 schools with a digital library; and 76,256 schools with functional ICT labs. A total of 53.9% of schools have an internet facility. The numbers are not particularly high, but the compilation of data shows that the government is cognizant of the situations at schools and that a dedicated effort to employ ICT in school education can be expected.

4. Challenges and problems

Each State in India has a distinct socio-economic configuration. This creates an inimitable scenario for numerous service sectors, including education. The process of school education is deeply rooted in the community structure and ethos. There is an intertwined relationship between socio-cultural diversity, the economic status of the State, including per capita income, and the quality of education. As such, the school education landscape in India is multilayered and multidimensional within each of these layers.

The existing strengths and challenges in school education across the country can be elucidated through the data presented here. Education can be a strategic resource for the socio-economic mobility of every citizen of the nation. In India's case, there is a very large number of individuals seeking to be certified as educated. This is not unexpected, as India will be the youngest nation in the world by 2030. The high level of the GPI reflects the high enrolment rate of girls, although the large number of boys dropping out of formal education needs to be addressed. This can be achieved if vocational education is promoted at an early age, perhaps even from middle school. Motivating and encouraging people of all ages to continue education through night school or an open school system will help everyone understand the value of education. Of course, this requires affirmative action and multidimensional planning on the part of the government.

Education being on a concurrent[8] Union-State list is impacted by the financial well-being of the state. The maximum number of schools are run by State governments. A low level of GDP would mean the allocation of less funds, which would consequently lead to schools having fewer resources and this would impact the quality of education for the children in that state. Emerging from this cyclic process of poverty and education is a major challenge. Teacher recruitment is another critical factor and needs due attention, especially at public schools.

Despite an increase in overall enrolment across each stage, the transition from middle to secondary education is very low. The primary question here is whether the GER at the higher secondary level is low due to the lack of available schools or other socio-economic factors. It is crucial to note here that the age of 14, which is the endpoint for compulsory education (grades 1-8), is also the age after which the Child Labour (Prohibition and Regulation) Act of 1986 legally permits children to work. Consequently, children (more boys than girls) from economically disadvantaged families drop out of school and join the unskilled labour force. The earning potential of such jobs is extremely low for a person's entire life. This eventually impacts the GDP of the state in the long run and subsequently the GER in the state. The lowest GER (37.8) at the higher secondary level was reported in Bihar, which is also the lowest per capita income state in India. While the data partially explains the existing status, there may be other reasons for a low GER. Rigid subject boundaries and the limited ability to re-enter the school system after dropping out due to personal reasons could have also contributed to a low GER at different stages.

The teaching method at schools could be another reason for students dropping out across different levels of school education. The language spectrum in India is exceptionally diverse.

8 Concurrent list means that it is a joint responsibility of Union (central) and State government. Both put separate budget heads in annual budget for Education.

Multiple studies suggest that children's home-school connection is strengthened if the same language is spoken at both places.

Schools need to have basic infrastructure to provide quality education. Impending scenarios in education point to the need for enriched digital spaces. The education of children with disabilities is an area of concern, and due procedures are needed to get them in school and create an inclusive learning environment that is suitably equipped with different learning resources.

The ever-evolving structure of society has raised concerns about the idea of one's self as well as the relationship with the nation and others. This critical quest means that the role of education in nurturing the value system needs to be reconsidered. It is a challenge to interweave the much-needed value education in such a manner that individuals learn to value themselves, others and the nation in order to augment the prospects of sustainable living in the 21st century.

Collectively, the Union and State governments are committed to universalising formal education for each citizen of the country, regardless of the individual's socio-personal circumstances. While the law and policy are clear indications of this willingness, the process of implementing it requires more attention. The diversity of context and the intersectionality across these dimensions poses strategic challenges. The challenges are multi-dimensional and require an open-minded approach that is often compromised due to the pre-existing stereotypical deep-rooted belief system of the people who are placed in a position of responsibility to implement such plans, challenge the status-quo and bring about social change.

This means that systemic pathways need to be crafted and effectively and efficiently implemented so that the benefits of these policies, regulations and plans can reach ground zero and impact the lives of each citizen.

CHINA[9]

1. Overview of China

China is located in East Asia on the west coast of the Pacific Ocean. China has total land area of about 9.60 million square kilometres, and total sea area of around 4.73 million square kilometres. China officially has a single time zone, China Standard Time (CST). Despite its vast geographical expanse, which covers five time zones, the entire country follows this unified time.

China is divided into 34 provincial-level administrative regions (National Bureau of Statistics, 2024). In 2023, China's eastern region[10] (10 provinces/municipalities[11]) contributed 52.10% of the country's GDP, the central region (six provinces[12]) accounted for 21.60%, the western region (12 provinces/autonomous regions/municipalities[13]) accounted for 21.50% and the northeastern region (three provinces[14]) accounted for 4.80%.

As of the end of 2023, China had a population of over 1.4 billion (ibid.). According to the Seventh National Population Census published in 2021, the eastern region made up 39.93% of the total population, the central region accounted for 25.83%, the western region comprised 27.12%, and the northeastern region accounted for 6.98% (National Bureau of Statistics, 2021). In terms of gender, males represented 51.24% of the total population, while females represented 48.76%; the gender ratio was 105.07 (male to female, using females as 100) (ibid.). China is home to 56 ethnic groups, with the Han people comprising 91.11% of the population, while the remaining 55 minority groups account for 8.89% (ibid.). Permanent urban residents make up 66.16% of China's population (National Bureau of Statistics, 2024).

In 2020, China had a total of 253.384 million children aged 0-14. During the same year, the country recorded 11.988 million newborns, with a total fertility rate of 1.3, well below the replacement level of 2.1. This has contributed to a decline in China's school-age population in recent years, as fewer children are being born, resulting in a gradual decrease in the number of children entering the education system.

In terms of urban and rural distribution, children are concentrated more in cities and rural areas, with fewer residing in towns. The 0-14 age group is distributed as follows: 35.60% in urban areas, 25.60% in towns and 38.80% in rural areas. As regards gender, boys outnumbered girls, with males making up 53.10% of the 253.384 million children and females comprising 46.90%. This results in a gender gap of 15.803 million more boys than girls. Migration among school-

9 Chapter 1 includes data about mainland China. Data about the Hong Kong Special Administrative Region, Macao Special Administrative Region and Taiwan Province are not included. Please note that the totals and sub-totals of some data may differ due to rounding.

10 This classification of the eastern region, central region, western region and northeastern region does not include the Hong Kong Special Administrative Region, Macao Special Administrative Region or Taiwan Province.

11 The eastern region includes 10 provinces/municipalities: Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan.

12 The central region includes six provinces: Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan.

13 The western region includes 12 provinces/autonomous regions/municipalities: Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Xizang, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang.

14 The northeastern region includes three provinces: Liaoning, Jilin and Heilongjiang.

age children is becoming increasingly common in China. Approximately 33.64 million children aged 6–14 live apart from their registered households (excluding intra-city separations), accounting for about a quarter of children in this age group nationwide. Of these, 26.11 million are migrating within their province, while 7.53 million are moving between provinces (Office of the Leading Group of the State Council for the Seventh National Population Census, 2022).

In 2020, the number of ethnic minority children aged 0–17 reached 34.59 million, an increase of 3.96 million compared with 2010. This growth has led to a steady rise in the proportion of ethnic minority children within the overall child population, which increased from 7.60% in 1982 to 11.60% in 2020 (ibid.).

In 2023, there were 740.41 million employed individuals in China, with 470.32 million employed in urban areas, accounting for 63.52% of total employment. The total number of migrant workers[15] was 297.53 million, representing 40.18% of all employed individuals. Among these migrant workers, 40.65% were employed in local areas and 59.35% worked in other areas.

The per capita disposable income of national residents was USD 10,231.67 (adjusted for purchasing power parity, or PPP), and the median per capita disposable income of national residents[16] was USD 8,618.84 in 2023. In terms of place of permanent residence, urban residents had a per capita disposable income of USD 13,519.70 (median: USD 12,293.76), while rural residents had a per capita disposable income of USD 5,659.01 (median: USD 4,891.21).

China's per capita consumption expenditure[17] accounted for 68.33% of disposable income in 2023. The national per capita service consumption expenditure[18] accounted for 45.21% of the per capita consumption expenditure of residents. Additionally, 10.84% of China's per capita consumption expenditure was allocated to education, culture and entertainment.

China exhibits moderately high income inequality globally but ranks moderately low in terms of wealth inequality. The country's Gini coefficient[19] for income surpasses the 0.4 warning threshold, placing it among the higher levels of income disparity worldwide. However, wealth inequality metrics, including the wealth Gini coefficient and the proportion of wealth held by the top 1%, indicate that China's wealth disparity remains relatively modest on a global scale (Department of Employment, Income Distribution and Consumption of National Development and Reform Commission (NDRC) and China Institute for Income Distribution, 2022).

15 The annual number of migrant workers includes those who have worked outside their hometown for six months or more, as well as local migrant workers employed in non-agricultural industries within their hometown for six months or more during the year.

16 The median per capita disposable income refers to the income level of the most centrally located surveyed households when all surveyed households are ranked according to their per capita income levels, either from low to high or from high to low.

17 China's per capita consumption expenditure was USD 6,990.87 in 2023.

18 Service consumption expenditure refers to the spending of households on various life services, including catering, clothing and footwear processing, residential services, family services, transportation and communication services, education, culture and entertainment services, medical services and other services. China's per capita service consumption expenditure was USD 3,160.45 in 2023.

19 The Gini coefficient is a statistical measure of inequality within a population, often used to assess income or wealth disparities. It ranges from 0 to 1, where 0 represents perfect equality (everyone has the same income or wealth) and 1 represents perfect inequality (one person holds all the income or wealth). A higher Gini coefficient indicates greater inequality.

The urban-rural divide is the primary contributor to China's income inequality. In 2020, the per capita disposable income of high-income households (top 20%) in urban areas was USD 22,986.84 compared with USD 9,217.52 in rural areas, with urban incomes being 2.5 times higher. Among low-income households (bottom 20%), the disparity was greater, with urban incomes at USD 3,732.23 and rural incomes at USD 1,120.12. Urban levels were 3.3 times higher (ibid.). In recent years, a rapid increase in rural disposable income has helped reduce the urban-rural income gap. This narrowing divide is a key factor in the stabilisation of the Gini coefficient.

2. Overview of Chinese education

According to China's Seventh National Population Census released in 2021, for every 100,000 people, 15,467 people have received a higher education, 15,088 have received an upper secondary education, 34,507 have received a junior secondary education and 24,767 have received an elementary education. Among the total population, the illiterate population (people aged 15 and above who cannot read) was 37,750,200, resulting in an illiteracy rate[20] of 2.67% (National Bureau of Statistics, 2021).

The national common language and script are the basic languages of education and teaching at schools and other educational institutions in China. By 2020, the adoption rate of Mandarin across the country had reached 80.72% (Ministry of Education (MOE), 2021).

In 2023, pre-school education had 40.930 million enrolments. Elementary schools had 108.360 million enrolments, 18.779 million entrants and 17.635 million graduates. Junior secondary schools had 52.437 million enrolments, 17.546 million entrants and 16.236 million graduates. The retention rate of China's nine-year compulsory education (which includes elementary education and junior secondary education) was 95.70%.

In upper secondary education, the gross enrolment rate was 91.80%. Regular senior high schools had 28.036 million enrolments, 9.678 million entrants and 8.604 million graduates. In secondary vocational schools, there were 12.985 million enrolments, 4.540 million entrants and 4.155 million graduates (MOE, 2024). These figures represent 31.65%, 31.93% and 32.57% of the total for upper secondary education, respectively. This indicates that approximately one-third of students in upper secondary education were enrolled in secondary vocational schools.

Public schools are the dominant educational institutions in China, especially during the compulsory education stage. In 2023, only 3.81% of students enrolled in compulsory education attended private schools, while the proportions were higher for regular senior high schools (19.54%) and secondary vocational schools (20.52%) (ibid.). Private schools, unlike public schools, charge tuition fees at all educational levels and cater to diverse groups, including families with varying economic backgrounds and educational values. There are similar dynamics in international education, though most international students studying abroad are in higher education stages. These educational sectors reflect the interests and needs of different groups, as influenced by financial and cultural factors.

20 The illiteracy rate refers to the proportion of illiterate individuals aged 15 and above within the population of 31 provinces, autonomous regions, municipalities and active military personnel in mainland China.

Students with disabilities receive education through various forms: special education schools, special education classes attached to other types of schools, inclusive education at regular schools and home-based education services. In 2023, enrolments for all types of special education was 912,000, with 155,000 entrants and 173,000 graduates. Among them, 341,000 special-needs students were enrolled at special education schools, accounting for 37.42% of total enrolments (ibid.). Special education schools typically operate under a nine-year integrated system. Special education schools waive tuition fees for students in the compulsory education stage and offer reductions or exemptions for miscellaneous fees to students from economically disadvantaged families. Governments at all levels are required to establish scholarships to assist economically disadvantaged students in attending school (MOE, 1998).

According to data published by the Chinese Ministry of Education, in 2022, total enrolments across Chinese elementary schools, junior secondary schools and regular senior high schools reached 187 million. Of these, 85.30% were students from counties, towns and urban areas, while 14.70% came from rural areas. Breaking this down by educational level: in elementary schools, 81.09% were students from counties, towns and urban areas, while 18.91% were from rural areas; in junior secondary schools, the proportions were 88.46% and 11.54%, respectively; and in regular senior high schools, the proportions were 95.97% and 4.03%, respectively (MOE, 2023a).

The distribution of enrolments across mainland China's four areas is consistent with the distribution of their populations. In elementary schools, the proportions of enrolments in the eastern area, central area, western area and northeastern area were 39.23%, 27.76%, 29.11% and 3.89%, respectively. In junior secondary schools, the proportions of enrolments in the four areas were 37.73%, 29.03%, 28.65% and 4.59%, respectively. In regular senior high schools, the proportions of enrolments in the four areas were 35.15%, 29.57%, 29.24% and 6.04%, respectively. Overall, total enrolments across all three educational levels were distributed as follows: 38.22% in the eastern area, 28.37% in the central area, 29% in the western area and 4.40% in the northeastern area (MOE, 2023b).

In 2022, the total number of elementary schools, junior secondary schools and regular senior high schools reached 216,623. Schools located in counties, towns and urban areas accounted for 58.55% of this total, while rural schools made up 41.45%. By educational level: 48.97% of elementary schools were located in counties, towns and urban areas, with 51.03% in rural areas; for junior secondary schools, the proportions were 75.52% and 24.47%, respectively; for regular senior high schools, the proportions were 94.36% and 5.64%, respectively (MOE, 2023a).

As for the distribution of schools in mainland China's four areas: 31.56% of elementary schools were located in the eastern area, 30.88% in the central area, 33.34% in the western area and 4.21% in the northeastern area; 31.94% of junior secondary schools were located in the eastern area, 31.75% in the central area, 28.47% in the western area and 7.84% in the northeastern area; 36.46% of regular senior high school were located in the eastern area, 27.20% in the central area, 29.26% in the western area and 7.07% in the northeastern area. Overall, the total number of schools across all three educational levels were distributed as follows: 32% in the eastern area, 30.83% in the central area, 31.88% in the western area and 5.29% in the northeastern area (MOE, 2023b).

In terms of school attendance rate, between 2000 and 2020, school attendance rates for children aged 6–17 in China have shown significant improvement. In 2000, the average school attendance rate across China was 86.10%, but this figure increased to 91.80% in 2010 and 92% in 2020. The urban-rural gap in attendance rates also narrowed over this period. In 2000, attendance rates were 90.10% in urban areas and 84.40% in rural areas. By 2010, these rates had increased to 93.70% and 90.30%, respectively, and further to 92.60% and 91.10% in 2020, reflecting improved educational access in rural areas (Office of the Leading Group of the State Council for the Seventh National Population Census, 2022).

The school attendance rates for children aged 6–17 in China have steadily improved for both Han and ethnic minorities, with the gap between the two groups narrowing over time. In 2000, the rates were 87.20% for Han and 77.10% for ethnic minorities. By 2010, these figures rose to 92.40% and 87%, respectively, and further to 92.30% and 89.90% in 2020, highlighting progress in educational access for ethnic minorities (ibid.). From a gender perspective, disparities that once put girls at a disadvantage have been reversed. In 2000, girls aged 6–17 were less likely than boys at the same age to access education (87.10% for boys and 85.10% for girls). However, since 2010, girls have surpassed boys in attendance rates, marking a notable shift in gender equality in education. In 2010, attendance rates were 92.10% for girls and 91.60% for boys, and by 2020, they further increased to 92.40% and 91.70%, respectively, highlighting a continued positive trend toward closing the gender gap in education (ibid.).

3. Educational system in China

3.1. System of all educational levels

China's education system covers pre-school education, compulsory education, upper secondary education and higher education (Figure 1). Compulsory education includes elementary education and junior secondary education, while higher education includes undergraduate education and graduate education.

Pre-school education. In China, children usually enrol in pre-school at the age of two or three and leave pre-school at the age of six. Although pre-school education is not compulsory, the government actively promotes its accessibility. Both public and private pre-schools play significant roles in China's early childhood education landscape.

Compulsory education. China follows a system of nine-year compulsory education, which all school-age children and adolescents receive. This typically comprises six years of elementary education followed by three years of junior secondary education. However, there is some variation between regions with a small number of them using a "5+4" structure. Compulsory education in public schools is publicly funded and uniformly implemented by the State. With no tuition or miscellaneous fees being charged, the State has established a guaranteed mechanism to use funds for compulsory education. Private schools also provide elementary and junior secondary education, but they are not tuition-free. The curricula and standards for compulsory education are set by the Ministry of Education and implemented nationwide by provincial and municipal governments. Article III of Compulsory Education Law of the People's Republic of China stipulates that well-rounded education (suzhi education)[21] shall be

21 Well-rounded education is close to but different from well-rounded education in the U.S., which refers to education covering multiple subject areas. This notion is close to the notion of liberal arts education in the west, and it emphasises a holistic approach to student development, including development based on moral, intellectual, physical and aesthetic aspects.

provided to improve the quality of education and enable children and adolescents to achieve all-round development – morally, intellectually, physically and aesthetically – in order to lay the foundation for cultivating a well-educated and self-disciplined workforce with high ideals and moral integrity (National People's Congress, 2018). China has been fully implementing well-rounded education since 1999 (China Education Daily, 2018). It is based on a quality-oriented approach and fundamentally differs from exam-oriented education in its goals and methods. While quality-oriented education emphasises holistic development, exam-oriented education focuses narrowly on improving school admission rates. Quality-oriented education seeks to enhance students' knowledge structures and cultivate creativity and practical abilities, whereas exam-oriented education limits itself to teaching exam-specific content and skills. Additionally, quality-oriented education encourages students to internalise knowledge as part of their personal growth, while exam-oriented education prioritises the ability to reproduce learned material in exams (China Education Daily, 2005). Well-rounded education aims to cultivate well-rounded individuals equipped with various skills and expertise, moving beyond just academic performance to better prepare students for modern society and future challenges.

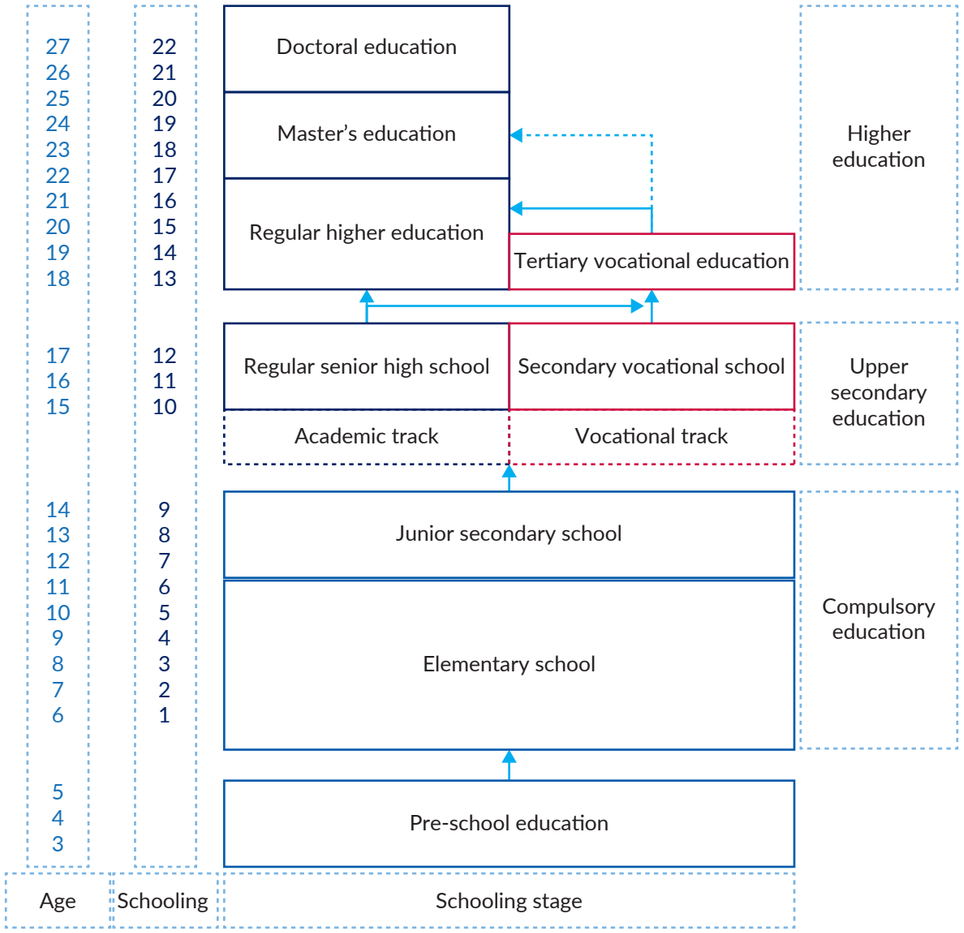


Figure 1 – The education system of China

Upper secondary education. Following compulsory education, students have the option to pursue upper secondary education, which typically lasts for three years. This stage of education is comprised of two types of schools: regular senior high school and secondary vocational school. Regular senior high schools represent an academic track, while secondary vocational schools represent a vocational track. Before entering upper secondary schools, students must complete a senior high school entrance examination (zhongkao). Based on their examination results, students are assigned to different types of upper secondary schools. In China, upper secondary education is mostly publicly funded.

Higher education. Higher education in China is comprised of undergraduate education and graduate education. Admissions to undergraduate education are based on students' scores in the college entrance examination (gaokao), and admissions to graduate education also depend on students' results in entrance examinations. In China, higher education is mostly publicly funded.

3.2. Spending on all educational levels

This section describes the following five aspects of educational resources in China: overall expenditure on education, general public expenditure on education, general public operating expenditure on education per student, family expenditure on education and family expenditure on off-campus tutoring.

China's overall expenditure on education nationwide reached almost USD 1.525 trillion in 2022 (MOE et al., 2023), while expenditure on education from the national budget[22] reached just over USD 1.205 trillion. Moreover, expenditure on education from the national budget accounted for 4.01% of China's GDP in 2022[23].

China's general public expenditure on education[24] reached USD 976.06 billion in 2022 and accounted for 15.07% of the national public budget in 2022[25].

In 2022, national general public expenditure on education per student in mainland China was USD 3,180.42 for elementary schools, USD 4,513.17 for junior secondary schools and USD 4,753.34 for regular senior high schools (MOE et al., 2023). A comparison of data from provinces, municipalities and autonomous regions with the national averages reveals that most provinces and municipalities in the eastern area exceeded these national figures, with 70% surpassing the elementary school expenditure, and 90% exceeding the junior secondary school expenditure and the regular senior high school expenditure. In contrast, very few provinces in the central area exceeded the national averages, with none surpassing the elementary school expenditure or regular senior high school expenditure, and only 16.67% exceeding the junior secondary school expenditure.

China's general public operating expenditure on education per student among the various educational sectors and levels account for more than 93% of the general public expenditure

22 Spending on education from the national budget mainly comes from government finances, government-managed funds, businesses running schools in partnership with the government, school-run businesses and not-for-profit organisations.

23 China's GDP was USD 30.09 trillion in 2022.

24 General public expenditure on education includes operating expenditure, investments in infrastructure and education surcharges.

25 China's national public budget was USD 6.48 trillion in 2022.

on education per student. In 2022, the figures for regular senior high school and junior secondary school were USD 4,424.80 and USD 4,282.85, respectively, while the figure for elementary school was USD 3,048.12.

In terms of education expenditure per family, the figures for counties, towns and urban areas in China not only surpass the national average, but also significantly exceed those for rural areas. In elementary school, the national average expenditure was USD 953.90, while families in counties, towns and urban areas spent USD 1,536.21 compared with USD 452.71 in rural areas (We, 2023). For junior secondary schools, the national average was USD 1,450.33, with urban areas spending USD 2,186.07 and rural areas USD 907.79 (ibid.). In regular senior high schools, the national average was USD 2,423.95, while urban areas spent USD 2,923 and rural areas USD 1,846.72 (ibid.).[26]

These disparities highlight the significant gap in educational investment between urban and rural families, and they reveal that the urban-rural divide is most pronounced at the elementary school level, with a significant gap also observed at the junior secondary school level, surpassing that of regular senior high schools. Despite the fact that nine-year compulsory education in public school is free for all Chinese students, this divide may partly stem from disparities in spending on off-campus tutoring and private school education.

Regarding the proportion of family expenditure allocated to off-campus tutoring within total education expenditure, families in counties, towns and urban areas also have significant advantages. In the elementary school stage, on average, 26.20% of families' education expenditure was spent on off-campus tutoring, with urban families spending 41.20% compared with only 13.50% in rural families (We, 2023). In the junior secondary school stage, the national average proportion was 18.40%, with urban families spending 30.10% and rural families 9.60% (ibid.). In the senior secondary school stage, the national average was 11.70%, while urban families allocated 17.40% and rural areas 5.50% (ibid.).[27]

If families were divided into five groups based on their total annual consumption expenditures: the lowest 20%, 20%–40%, 40%–60%, 60%–80% and the highest 20%, the average annual per-student expenditure on off-campus tutoring for families in the highest 20% group was USD 1,769.72 compared with just USD 49.67 for those in the lowest 20% group. Among the top 5% of families, this figure soared to USD 3,249.76, while it was only USD 40.64 for the lowest 5%. When considering the proportion of off-campus tutoring expenditure to total per-student education expenditure, this share increases with the household's economic standing. For the lowest 5% group, the proportion was only 6%, whereas it rose to 47.90% for the highest 5% group.

This situation suggests that off-campus tutoring and private school education are primarily available to families with higher socio-economic status, creating disparities in access to these educational resources. The ability to afford private schooling and additional tutoring is often dependent on family income and wealth, which can limit opportunities for students from lower-income backgrounds. This inequality may contribute to educational imbalances and reinforce socio-economic divisions.

26 The data is drawn from the 2018/2019 school year and encompasses 29 provinces, municipalities and autonomous regions in mainland China, excluding Xinjiang and Xizang.

27 The data is drawn from the 2018/2019 school year and encompasses 29 provinces, municipalities and autonomous regions in mainland China, excluding Xinjiang and Xizang.

3.3. China's efforts to promote diversity in education: Expanding excellence and improving quality

After the Chinese people's demand for "having schools to attend" was met, the demand for "having good schools to attend" has become the prominent concern in Chinese society today (Xinhua, 2024). The main challenge in China's education system lies in the gap between society's need for equitable and high-quality education and the unbalanced and insufficient development of education resources, particularly between regions and between urban and rural areas. For instance, the distribution of highly educated teachers is uneven across the country's regions. In China's eastern region, the proportion of highly educated teachers is generally higher: in 2017, the average proportion of full-time teachers with a Master's or Doctor's degree in elementary, junior secondary and upper secondary schools was 2.50%, 5.80% and 13.40%, respectively. However, in the central and western regions, these proportions were lower, with averages of 0.50%, 1.90% and 7.20%, respectively, for the same levels in 2017 (MOE, 2018).

The main measures to solve this contradiction are to "expand the excellence and improve the quality" of China's basic public education service system. "Expanding excellence" means expanding the supply of high-quality educational resources; this requires gradually expanding the scope of free education, promoting the development of pre-school education for all and ensuring the successful operation of boarding schools and small-scale rural schools. "Improving quality" means improving the quality of basic education; this requires reforming educational methods and training methods, further implementing the Double Reduction policy[28] and improving education and teaching quality. Moreover, the quality of classroom teaching and after-school services needs to be comprehensively improved; in this process, schools need to play a major role.

4. Challenges and problems

4.1. Excellence Index performance

As part of the Education in China and the World project[29], an Excellence Index comprising various indicators has been developed to assess the strengths and gaps of Chinese compulsory education and upper secondary education compared with its global counterparts, which aims to identify ways to enhance quality and performance.

According to the Excellence Index, compared with selected countries[30], China's elementary education serves the highest number of children globally and ranks among the top tier for

28 The Double Reduction policy requires easing the burden of excessive homework and off-campus tutoring for students undergoing compulsory education. See: General Office of the CPC Central Committee and General Office of the State Council (2021). Guidelines on further easing the burdens of excessive homework and off-campus tutoring for students undergoing compulsory education. http://www.moe.gov.cn/jyb_xxgk/moe_1777/moe_1778/202107/t20210724_546576.html.

29 See: Liu, N., Feng, Z., and Wang Q. (2024). Education in China and the world. Springer. https://link.springer.com/book/10.1007/978-981-99-5861-0.

30 These countries include (in alphabetic order): Australia, France, Germany, India, Japan, the Netherlands, the Republic of Korea, the United Kingdom and the United States.

educational excellence. This sector also receives the largest government expenditure, has the highest survival rate for students advancing to grade four, and elementary students also demonstrate the most advanced social-emotional skills. However, China still lags behind in terms of educational expenditure per student and student completion rate.

Regarding the junior secondary education sector, China exhibits both strengths and weaknesses when compared with selected countries[31]. Chinese students often come from relatively low economic, social and cultural backgrounds, and the total expenditure on junior secondary education per equivalent full-time student is significantly lower than that of the countries that were compared. However, China has the highest proportion of teachers fully certified by the appropriate authority, and has the lowest student-teacher ratio among the selected countries. In terms of educational output, the repetition rate in China is low, and Chinese students tend to excel in scientific, mathematical and reading literacy compared with their peers. Nonetheless, various aspects of students' social-emotional development, such as their sense of belonging to school, may still require improvements.

Chinese regular high school education has demonstrated impressive learning outcomes, but there is still a gap in evaluating high school excellence from an international perspective, particularly in terms of indicators beyond academic performance. According to the Excellence Index in the Education in China and the World project, Chinese high school students excel in gross enrolment rates, graduation rates and academic performance compared with other countries[32]. Notable accomplishments in educational infrastructure include well-equipped science labs, multimedia classrooms and widespread Wi-Fi access in schools. Nevertheless, compared with the selected countries, China still faces challenges in several key indicators, such as total spending per full-time student, the proportion of teachers with a Master's degree or higher and the percentage of students who gain admission to top four-year universities.

4.2. Challenges in the developing stage: 'From Large to Strong'

China has explicitly stated its plan to "accelerate the establishment of a robust education system, marking a strategic initiative at the national level and presenting a significant challenge". To achieve this educational goal, China has issued a series of policies, such as China's Education Modernisation 2035[33], which outlines a comprehensive plan for the reform and development of the education system.

With the rapid development of China's economy and society, as well as the optimisation and upgrading of its industrial structure, the growing demand for high-quality talent has emerged as a significant challenge (Zhu, 2023). More talent needs to be trained with innovative spirit and practical skills to meet the needs of industrial modernisation and economic and social development.

China needs to enhance its education governance system, improve education governance capabilities and promote the sustainable and healthy development of education. This requires continuous reforms in the education system. Promoting innovation and change in educational and teaching methods is also crucial to improving the quality and efficiency of education.

As the concept of lifelong learning becomes deeply ingrained in society, more individuals are prioritising self-improvement and education. There is a growing recognition across all sectors of Chinese society about the importance of education, which has resulted in a consensus about the need to prioritise educational development. The consensus provides a powerful social foundation and broad support for building a strong country in education while also raising higher expectations. However, getting all sectors of society to actively participate in and be satisfied with this educational development remains a major challenge.

4.3. Challenges caused by ongoing unprecedented changes

The world is currently experiencing unprecedented changes that have not been seen in centuries and present a significant challenge that China must confront as it develops its education system.

First, every industrial and technological revolution in human history will be accompanied by developments and transformations in education. The information revolution serves as the technical foundation for major changes in global education, presenting humanity with a series of challenges related to knowledge acquisition. For example, the modes of curriculum preparation and textbook development, the profound learning capabilities of artificial intelligence (AI) that surpass traditional learning methods and the evolution of modern schools and educational systems all pose great challenges.

Second, changes in the global governance system and international order are accelerating. The world is experiencing unprecedented shifts and adjustments in governance structures, which will ultimately impact the education systems of various countries. These changes will require reforms in the goals, tasks, strategies and methods of education.

Third, humanity must confront global common crises more frequently. These challenges can exacerbate regional disparities in educational resources and disrupt teaching environments and staffing, thereby affecting the quality of education. Additionally, they can limit international exchanges and cooperation, hindering the sharing of educational resources.

31 These countries include (in alphabetic order): France, Germany, Japan, the Netherlands, the Republic of Korea, the United Kingdom and the United States.

32 The countries compared with China include (listed in alphabetic order): France, Germany, Japan, the Netherlands, the Republic of Korea, the United Kingdom and the United States.

33 See: The CPC Central Committee & the State Council (2019). China's education modernisation 2035. https://www.gov.cn/zhengce/2019-02/23/content_5367987.htm

SOUTH AFRICA

1. Overview

South Africa, often referred to as the "Rainbow Nation", is a country characterised by diverse cultures, ethnicities and languages. Compared to many of its African counterparts, South Africa has an advanced economy with a diverse industrial base and a well-established financial sector. However, the nation faces significant challenges, including high levels of inequality, unemployment and poverty. The World Bank (2024) ranks South Africa as the world's most unequal society with a Gini coefficient of 63. The country relies on education to reduce inequality, foster social cohesion and drive economic growth. In this postcolonial space, post-apartheid educational policies, while democratising access to education, remain constrained by entrenched structural disparities.

Situated at the southern tip of the African continent, South Africa's population is projected to increase from 60.4 million in 2023 to over 63 million in 2025 (51% are female). Of this population, 27.5% are aged younger than 15 years, with a birth rate that remains positive at approximately 18.4 births per 1,000 people (STATSSA, 2024c), positioning it among the highest in BRICS countries. More than half of the population lives in three provinces: Gauteng, KwaZulu Natal and the Western Cape. There is a discernible split between its urban and rural regions, with the urban population accounting for approximately 68.82% of the total as of 2023. This signifies a strong concentration of the population in urbanised areas, driven by ongoing urbanisation and the pull factors associated with cities like jobs and services. The remaining 31.18% of the population resides in rural areas and often faces challenges such as poverty, limited access to advanced infrastructure, reduced economic opportunities and insufficient public services.

The population demographics[34] consists of four main ethnic groups: Black African (81.4%), Coloured (8.2%), White (7.3%) and Indian (2.7%). While the majority of South Africans practice Christianity (85.3%), Hinduism and Islam are also prevalent. South Africa has 12 official languages and the five most widely spoken languages in households include: Zulu (24.4%), Xhosa (16.3%), Afrikaans (10.6%), Sepedi (10.0%) and English (8.7%).

Religious and cultural beliefs shape gender roles and often reinforce gender disparities in educational access and outcomes. In many communities, traditional gender roles may prioritise boys' education over girls, especially in rural areas where cultural expectations may push girls towards domestic duties or early marriage. Gender disparities also extend to subject choices, with less than 30% of women enrolled in STEM fields due to societal expectations and limited support structures. Additionally, while more women have a tertiary qualification than men, fewer women are employed.

South Africa's nine provinces exhibit diverse geographical, economic and demographic profiles, which directly influence educational access, quality and outcomes. This heterogeneity underscores the complex nature of South Africa's schooling system and its persistent inequalities. The main features of each province are:

34 Population demographics are based on Department of Statistics mid-year estimates, 2024

Gauteng is the smallest and most densely populated province. The province's geography is marked by its urban centres, notably Johannesburg and Pretoria, the country's economic and administrative capitals, respectively. The urban centres are highly urbanised and industrialised with a diverse population and a high level of in-migration and youth. The primary languages spoken include Afrikaans, English, Zulu and Xhosa. Educational outcomes are relatively high, with better access to educational infrastructure than other provinces. However, stark inequalities persist within the province; schools in affluent urban areas benefit from private partnerships that ensure infrastructure and resources, while those serving low-income communities in townships and informal settlements face overcrowding.

Western Cape, with Cape Town as the provincial capital, is known for its strong agricultural sector, as well as its tourism industry. This province has the lowest unemployment rates, and Afrikaans, English and Xhosa are the main languages spoken in the province. Educational outcomes in the Western Cape are among the highest in the country with strong governance and ICT integration. However, township schools lag behind affluent suburban schools.

KwaZulu-Natal, with Durban as its economic hub, is South Africa's second-most populous province and has the highest Human Immunodeficiency Virus (HIV) prevalence in the world. The province is notable for its diverse economy, which includes agriculture, tourism and manufacturing. The majority of the population is Zulu and the urban-rural continuum is strongly evident in daily life. The province has made strides in improving educational access, yet challenges remain in achieving uniform quality across all areas. Socio-economic disparities continue to affect educational achievements, particularly in remote, rural areas with limited resources, high teacher absenteeism and infrastructural deficits.

Eastern Cape remains one of the poorest provinces in South Africa, with large rural areas and an economy reliant on agriculture (livestock) as a primary source of income, alongside the manufacturing and automotive industry. With a predominately rural population, it has the highest youth population aged younger than 15 (33%) and migration rates. The main languages spoken are Xhosa and Afrikaans. Educational outcomes are generally the lowest in the country, with higher drop-out rates and low literacy levels, largely due to infrastructure gaps in rural areas (lack of electricity and sanitation) and the significant distances that many students travel to access schools.

Limpopo is a largely rural province, bordering Zimbabwe, Botswana and Mozambique. It is one of the poorest provinces, with high unemployment rates and reliance on subsistence farming and mining (platinum). The province has the second youngest demographic, with a significant proportion of its population (31.7%) under the age of 15. The primary languages spoken include Sepedi, Venda and Tsonga. Educational outcomes in Limpopo are among the lowest in the country, with high dropout rates and poor performance in national assessments. The province faces significant infrastructural challenges, including a lack of proper classrooms, sanitation and teaching materials.

Mpumalanga's geography supports agriculture (timber), mining (coal) and tourism, attracting visitors to its natural attractions and game parks (like the Kruger National Park). The population is Siswati-speaking and has a high youth population due to parents migrating to the cities. While the province has seen improvements in education infrastructure, education outcomes are mixed, with many schools in rural areas lacking basic facilities and resources.

Free State is a landlocked region characterised by its landscapes and extensive agricultural land (maize and wheat), but it also faces challenges related to water scarcity. It has the lowest population density and a balanced urban-rural split. Currently, the province's education

performance is the highest in the country, but disparities in rural areas persist, with infrastructure constraints and fewer qualified teachers.

North West is a small diverse province that relies heavily on mining (platinum), agriculture (maize) and tourism. Predominantly rural, the population speak Setswana and faces such challenges as high unemployment and poverty. Educational outcomes in North West are variable, with urban areas generally performing better than rural regions, which have inadequate resources and teacher shortages.

Northern Cape is South Africa's largest province by land area but has the smallest population. Its predominantly arid environment (Kalahari Desert) is known for mining (diamond and iron ore) and sheep farming with high unemployment and poverty. Access to education in the Northern Cape is hampered by geographical isolation, limited infrastructure and teacher shortages, resulting in educational performances below the national average.

While egalitarian, post-apartheid policies have expanded opportunities, entrenched inequalities persist across provinces, with rural and low-income areas facing major challenges in infrastructure, resources and teacher availability. As South Africa continues to struggle with high inequality and unemployment, the role of education remains central to fostering social cohesion and economic development, making it a crucial avenue for addressing systemic disparities.

1.1. South African education system

The South African schooling system is shaped by the country's 400-year postcolonial history with laws and policies that aim to transform the system to provide equitable, quality education to all students. The Constitution of South Africa (1996) recognises education as a basic human right, and the South African Schools Act (SASA) of 1996 was promulgated to address historical inequalities and create a unified, non-discriminatory education system (DBE, 2020). The Act also made education compulsory for all children aged 7 to 15, emphasising inclusive policies to prevent discrimination based on race, gender or disability.

1.1.1 Structure of the national education system

In 2023, South Africa's education system consisted of 13.44 million students, with 94.5% in public schools and 5.5% in private institutions. In total, there are 24,836 schools and 454,749 educators, with the majority of private schools situated in Gauteng (918) and Western Cape (319). Over 10 million students attend schools with no-fees policies and receive food as part of a school meal plan (STATSSA, 2024a). Despite overall growth in access, the system faces persistent challenges, including a 40% attrition rate between grade one and grade 12, infrastructure gaps with 80% of township schools lacking basic ICT facilities and stark differences in teacher-learner ratios between public (1:34.2) and private (1:16) schools.

The structure of the schooling system as shown in Figure 1 is divided into three bands: Early Childhood Education (ECE), General Education Training (GET) and Further Education Training (FET). The Early Childhood Development band is designed to support the holistic development of children from birth to four years old. This band encompasses various programmes and services that aim to ensure that children reach their full potential in terms of physical, cognitive, emotional and social development. Although attendance is not mandatory, it is strongly encouraged to provide each child with access to high-quality, inclusive and age-appropriate early learning and development opportunities.

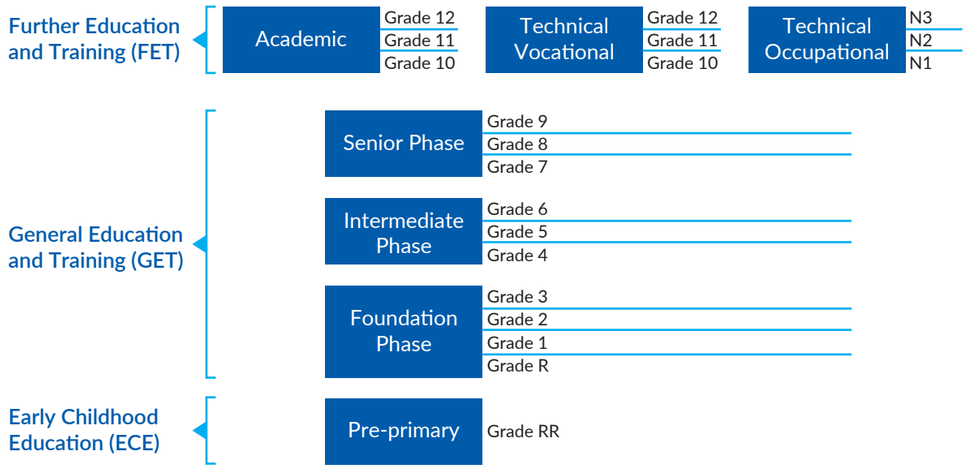


Figure 1 – Schooling system

Source: Adapted from https://wcedeportal.co.za/the-three-stream-model and Equal Education (The Three Stream System)

GET is compulsory. It starts at the Foundation Phase at grade R to 3 (ages 5 to 9) and focuses on literacy, numeracy and life skills. The Intermediate Phase includes grades 4-6 (ages 9 to 12) and builds on foundational skills, while introducing such subjects as natural sciences, social sciences and technology. The next phase, the Senior Phase from grades 7-9 (ages 13 to 15), expands into specialised subjects such as technology and economic management.

Students who remain in the system can continue with **Further Education Training** (ages 16 to 18). In the FET band, the Three-Stream Model was implemented in 2020 to offer more diversified learning pathways – academic, technical and vocational.

- **Academic Stream** – This stream focuses on traditional academic subjects, preparing students for general or formative education and can continue with post-school education training either at university or private higher education institutions. There is a strong emphasis on completing mathematics, physical sciences, social sciences and languages. Students in this stream aim to obtain the National Senior Certificate (NSC), which is required for admission to tertiary education.
- **Technical Vocational Stream** – The curriculum is split into theoretical (50%) and technical (50%) subjects that provide students with practical skills and training in such fields as engineering, hospitality, information technologies and agriculture. Vocational education is offered through TVET colleges and certain technical high schools to prepare students for the workforce or further education. Similar to the academic stream, students write a national exam at the end of their schooling to obtain a National Certificate Vocational (NCV). This is a qualification that aims to provide students with practical skills and knowledge to prepare them for the workforce or further education.
- **Technical Occupational Stream** – The curriculum in this stream consists of a combination of theoretical and practical subjects (25% theory and 75% practical or 40% theory and 60% practical) that provide students with hands-on, skills-based training for specific occupational trades, such as plumbing, carpentry and automotive repairs. It aims to equip students with the skills they need to immediately enter the workforce or undergo further training through learnerships and apprenticeships.

In addition, South Africa has a National Qualifications Framework (NQF) to classify and coordinate qualifications across different educational and training institutions. The framework, as shown in Table 1, consists of **10 levels**, ranging from **Level 1 (equivalent to grade 9)** to **Level 10 (equivalent to doctoral degrees)**. Each level represents a specific set of knowledge, skills and expertise that students are expected to achieve. The framework ensures that qualifications are consistent, quality-assured and aligned with international standards, facilitating lifelong learning and career advancement.

NQF Level	Qualification
NQF Level 1	Grade 9 or General Education and Training: Adult Basic Education and Training Level 4
NQF Level 2	Grade 10 or N (C) V Level 2
NQF Level 3	Grade 11 or N (C) V Level 3
NQF Level 4	Grade 12 or Matric Equivalent Certificates or N C V Level 4
NQF Level 5	Higher Certificates
NQF Level 6	Diploma or Advanced Certificates
NQF Level 7	Advanced Diplomas or Bachelor's Degrees
NQF Level 8	Post Graduate Diplomas or Honours Degrees
NQF Level 9	Master's Degrees
NQF Level 10	Doctoral Degrees

Table 1 – National Qualifications Framework

Source: https://www.matric.co.za/nqf-levels-explained/

1.1.2 Funding structure

South Africa's education budget allocation increased to 7% of GDP for the 2023/2024 financial year. The Department of Basic Education (DBE) is responsible for the management and allocation of resources to schools, which includes the provision of teaching materials, infrastructure development and the training of teachers (Diba et al., 2023). The Department of Basic Education allocates funding across provinces through the Provincial Equitable Share (PES) formula, a constitutional mechanism designed to redistribute national revenue to address historical inequities and ensure access to education. The formula takes into consideration demographic factors, enrolment data and socio-economic status. Provinces with higher poverty rates (Eastern Cape and Limpopo) receive additional funds to address infrastructure deficits and resource gaps. In addition to the national budget, provinces receive conditional grants to supplement funding. The grants must be allocated to interventions that the national government deems as important to improve education quality. The current critical strategic priorities include:

- **Foundational skills development:** Strengthen literacy and numeracy in early grades (grades R–3)
- **Curriculum with skills and expertise:** Implement a curriculum to develop workplace skills
- **Quality and efficiency:** Improve quality and efficiency through standardised assessments, thereby reducing failure, repetition, and dropout rates, and teacher development
- **Early childhood development:** Expand education services for 0 to 4-year-olds
- **Infrastructure and digital readiness:** Prioritise water, sanitation and electricity in rural/township schools and accelerate ICT rollout.
- **Social cohesion and safety:** Collaborate with other agencies to promote social justice (DBE, 2020).

Schools also receive funding from the private sector through school fees, donations and partnerships with business and non-profit organisations. School fees in public schools are determined by the government based on a quintile ranking system (private schools apply different criteria in determining fees). The ranking of a public school is determined by such factors as the income levels of the surrounding community, unemployment rates and the availability of basic services. Quintile 1 represents the poorest schools and are no-fee-paying schools, while Quintile 5 schools are often located in high socio-economic neighbourhoods and receive the least amount of funding from the government. Schools ranked in Quintiles 2 to 4 are partially funded by the government and may charge tuition fees, but they are also required to provide financial aid to parents who cannot afford to pay the fees. Schools ranked in Quintile 5 receive the least amount of government funding and are allowed to charge higher tuition fees. The ranking system is also used to determine entitlement to other benefits. Schools ranked on quintiles 1 to 3 are entitled to benefits such as free school meals and transport. There is a significant gap between public and private school fees. Public school fees in 2023 averaged between ZAR 24,408 and ZAR 36,072 compared with private schools, which charge from ZAR 71,496 and ZAR 105,084 to over ZAR 300,000[35] per annum (Fees, 2023).

1.1.3 School governance and regulation

The SASA of 1996 provides the legal framework for the organisation, governance and funding of public schools. In terms of governance, it aims to balance centralised policymaking with decentralised implementation. As such, the Department of Basic Education oversees both public and private schools, ensuring that all schools adhere to certain national standards for curriculum and assessments. However, private schools have more flexibility to supplement their curriculum with additional subjects, advanced programmes and extracurricular activities. For example, many private schools offer the International Baccalaureate (IB) or Cambridge International Examinations (CIE).

The Department of Basic Education is managed by the Minister of Basic Education, sets national policies, curriculum standards and strategic priorities, allocates funding and monitors compliance. Each Provincial Education Department (PED) is responsible for implementing Department of Basic Education policies. Provinces are divided into districts, with school principals in each school reporting to their respective district managers. The district managers act as intermediaries between schools and principals, monitoring school performance and compliance.

At the school level, School Governing Bodies (SGBs) are involved in decision-making about budgets, language policies and staff appointments. SGBs consist of various stakeholders, including parents, educators, students and community members, with parents typically holding a majority of the seats. This structure is intended to foster a collaborative environment where all voices can contribute to the decision-making processes that affect schools. However, several challenges persist in achieving effective community participation

35 In 2023, the average salary in South Africa was ZAR 26,471.

in school governance, particularly in rural areas. Many SGBs struggle with financial oversight, corruption, the mismanagement of funds and a lack of training (Kekana & Makura, 2020). The effectiveness of SGBs is also influenced by the socio-economic context of the schools they govern, with rural schools facing unique challenges such as poverty, a lack of transport and long distances to travel to schools (Gamede, 2021).

1.2 The South African school system and the context of inequality and diversity

1.2.1 Poverty and structural inequality

Poverty in South Africa disproportionately affects students from low-income households and rural areas, creating systemic barriers to academic achievement. Food insecurity is high with approximately 75% of students relying on school meal plans (STATSSA, 2023a). In addition, 70% of young children live below the poverty line and 30% exhibit stunted growth (DBE, 2024). Other factors that are linked to socio-economic status are physical and psychological health and well-being. These factors adversely affect their ability to focus on their studies, which influences their outcomes (Wabiri & Taffa, 2013).

Pro-poor policies have been implemented to address poverty through social grants, no-fee schools and free healthcare for children under six. Despite increased spending and resource allocation, qualitative educational disparities persist (Van der Berg, 2002). The effectiveness of poverty alleviation programmes and social policies in reducing inequality is a debated issue (Khumalo, 2003). Some argue that current policies favour privileged groups and fail to adequately address the needs of disadvantaged populations (Clercq, 2020). Continuous monitoring and evaluation of education policies and their implementation are crucial to achieving transformation goals (Rembe, 2005).

Socio-economic factors also influence parental participation in children's education. Parents in high-income households are often more involved in their children's education. They often have high levels of education that enable them to help with homework and can provide additional educational resources such as private tutors, books and technologies (Ndebele, 2015). Parents from high-income households are also more likely to advocate for their children's needs and participate in school governance structures such as governing bodies (Ndwandwe, 2023). Conversely, parents in low-income households may lack the time, resources or education to support their children's learning.

High levels of absenteeism, grade repetition, dropout rates and negative attitudes towards education are higher where students experience socio-economic challenges (Mbajiorgu & Odeku, 2023). Some of the main reasons for not attending school are poor performance, finances, illness, disability and family commitments (STATSSA, 2023b). School absence is higher for girls since they have greater gender-role demands to attend to family responsibilities. High levels of absenteeism diminish student engagement with education and increase the likelihood of falling behind academically, impacting school dropout and reducing the number of students who transition from the General Education and Training (GET) to FET band.

Teachers in rural and township schools face additional pressures, such as overcrowded classrooms and a lack of institutional support, making it difficult to apply language policies consistently (Omidire, 2019).

1.2.2 Youth employment

Youth unemployment remains a critical issue in South Africa, with the number of unemployed individuals between the ages of 15 and 34 increasing by 47% from 14.7 million in 1996 to 21.6 million in 2022 (STATSSA, 2024b). What is more alarming is that unemployment among 15 to 24-year-olds reached 60% in 2024. The employment challenges have been attributed to mismatches with workplace skills.

The misalignment between the skills taught in schools and post-school institutions and the needs of the labour market has been attributed to an inadequate education system, economic shifts towards skills-intensive job sectors and a lack of work experience (Jubane, 2020). Numerous students progress through the education system without having acquired the literacy, numeracy and digital skills needed to participate in the economy (Habiyaremye et al., 2022; Saben, 2023). Additionally, students' lack of soft skills, such as leadership, communication and networking, further diminishes their ability to find work.

TVET institutions are designed to equip students with practical skills for the job market. However, many of these institutions face challenges related to poor infrastructure, insufficient funding, outdated curricula and a shortage of qualified instructors (Mseleku, 2021). This undermines the effectiveness of TVET as a viable solution to youth unemployment and limits the ability to produce graduates who are ready for the workforce.

Intersectionality issues for youth employability in terms of socio-economic factors, social capital, gender, race, geographical region and economic growth contribute to youth employment. Socio-economic factors also play a role in youth employability. High costs associated with job entry, including transportation and professional attire, prevent young people from pursuing available opportunities (Webb, 2021). Young people lack social capital with connections in professional circles, which further excludes them from employment opportunities (Shaw & Wheeler, 2022). Black Africans are more likely to be unemployed compared with other population groups. In 2024, more than 50% of Black Africans in the labour force were unemployed compared with 15.2% for the white population (STATSSA, 2023b).

This data confirms that the labour market absorbs young men more quickly than women. With high unemployment in rural areas, more young people are migrating to urban areas in search of work. This migration exacerbates youth unemployment with an oversupply of job seekers for few formal job opportunities (Webb, 2021). Economic factors further constrain employment with a limited average GDP growth rate of 2.36% from 1994 to 2024.

1.2.3 Linguistic diversity

Linguistic diversity affects academic achievement in instances where students are unable to receive instruction in their home language. In many South African schools, English is introduced as the medium of instruction from grade 4 onwards, creating a linguistic barrier for many students who are not proficient in the language (Ngcobo & Barnes, 2020; Xulu-Gama & Hadebe, 2022). Introducing English or Afrikaans in grade 4 does not provide students with enough time to develop academic fluency in English or Afrikaans. Literacy development is delayed, which results in low reading and writing skills. Students subsequently struggle to communicate and are unable to fully engage with the curriculum, thereby affecting their academic performance across all subjects (Probyn, 2006; Xulu-Gama & Hadebe, 2022). To improve academic success, students need to be taught in their mother tongue, particularly in the foundational years (Heugh, 2013).

Teaching and learning materials are a significant challenge to providing quality education. Curriculum and textbooks are seldom written in African languages and few reflect the cultural and contextual life-worlds that are familiar to the majority of South African teachers and students.

Purposely recognising and accommodating linguistic diversity in education (school climate, curriculum and instructional practices) strengthens identity, self-esteem and a sense of belonging. This linguistic diversity reflects the country's complex demographic landscape, where language acts as both a cultural marker and a tool for social mobility that provides economic opportunity (Probyn, 2001). In a postcolonial society, the marginalisation of Indigenous languages has led to the continued economic-oriented preference of parents to favour English as the primary language of teaching and learning: parents often prioritise English-medium education for perceived better opportunities, further entrenching the dominance of English in the educational landscape (Ntombela, 2018).

This linguistic hierarchy reinforces socio-economic disparities, as students proficient in English are better positioned to succeed academically and professionally, while those who speak Indigenous languages face systemic barriers (Rooy, 2013). Addressing attitudes and perceptions requires parents and teachers to make informed decisions about language choices and they can act as agents of change. In particular, SGB should be supported in making informed decisions about the language of instruction at their schools (Madonsela, 2023).

1.2.4 Rural-urban continuum

Rather than merely being a divide between urban and rural spaces, the urban-rural continuum signifies how families live on a continuum between these geographic spaces. Whereas young people and adults often work in urban spaces (with more job opportunities), they identify their primary abode, identities and sense of belonging with that of a rural home. Lives are thus on a continuum between urban and rural spaces.

The rural-urban continuum in South Africa significantly influences education outcomes, particularly through the lens of a migrant workforce, infrastructure challenges and the appropriateness of curriculum. These factors collectively exacerbate the existing disparities between rural and urban education systems. The impact of geographical disparities extends beyond school facilities. Families in rural areas frequently confront transportation challenges that complicate their children's access to education. Longer travel times to reach schools contribute to higher absenteeism rates and delays in academic progress. Services to support the positive development of children in rural spaces are also more problematic as high-quality clinics, libraries and social welfare offices are scarce and difficult to reach.

Rural-urban migration is a prevalent phenomenon in South Africa that is driven by the search for better economic opportunities, improved education quality and enhanced health services in urban areas. This migration often results in a brain drain from rural regions as skilled individuals move to urban centres, leaving behind a less educated workforce (Mthiyane et al., 2022). Migration also disrupts family structures with many children not living with either parent (STATSSA, 2023b). Children do not live with either parent in rural areas like the Eastern Cape (32.9%), KwaZulu-Natal (23.4%) and Limpopo (21.2%) (STATSSA, 2023b); instead, mothers often depend on extended family for child-rearing support, making it difficult to connect with their own children.

A rural-urban divide is evident in South Africa as indicated by extreme disparities in infrastructure, learning materials and teacher qualifications. Urban schools, especially those in high socio-economic status areas, boast superior infrastructure with well-equipped classrooms, laboratories, libraries and access to digital resources. These institutions typically have highly qualified teachers who receive ongoing professional development, which contributes to a more effective educational experience (Du Plessis & Mestry, 2019). In contrast, rural schools often lack essential facilities, such as electricity, sanitation and technological infrastructure. Teachers in these areas frequently have lower qualifications and receive less professional development, which hinders the quality of instruction. The education environment is further compromised by larger class sizes and limited educational offerings, a reflection of the socio-economic dynamics that burden rural education. This disparity highlights the deeply entrenched inequalities that persist in the South African education system, effectively maintaining cycles of disadvantage.

The divide between urban and rural schools is exacerbated by a bimodal schooling system, where about 20% of schools (mainly those that historically served White and Indian people) perform well, while the remaining 80% (historically serving Black and Coloured children) perform poorly. This divide closely mirrors socio-economic disparities (Clercq, 2020).

The South African school system does not track the number of schools or students in terms of urban and rural settings. There is a lack of uniformity nationally as very few provinces categorise schools as rural or urban. Rather, the sector uses quintiles or 'no-fee' schools. Although this indicator assists with identifying schools in need of additional financial support, this metric does not allow for clarity on the growth or decline in rural and urban schools and student populations.

1.2.5 Teacher Professional Development and Training

Ensuring the consistency and effectiveness of teacher professional development (TPD) is crucial to strengthening the preparedness of instructors to teach, given the extreme systemic barriers. South Africa's education system faces significant challenges in teacher preparedness – be it pre-service teacher education or in-service TPD. Given its postcolonial history, teacher training institutions in South Africa that served Black and marginalised communities were underfunded and provided with substandard training. Teacher training (whether pre-service or in-service TPD) for teachers who educate students from these population groups suffered from fewer financial resources. The legacy of this inequality persists, creating the need for substantial interventions to address the gaps in teacher preparation and to support ongoing TPD.

Considering this historical context, there is a pressing need to not only improve pre-service teacher education, but also to focus extensively on the professional development of in-service teachers. In the 400 years of colonials and the 40 years of apartheid, many teachers did not receive adequate training and lacked sufficient subject knowledge and pedagogical skills, which directly affected the quality of teaching and learning (Motsoeneng, 2022). Rural and under-resourced areas struggle to participate in professional development training due to geographical isolation, a lack of funding, time constraints and administrative duties. Furthermore, teachers express concerns about the costs associated with attending training sessions, including travel and accommodation expenses (Ravhuhali, 2015).

Moreover, South Africa's teacher training programmes grapple with significant inadequacies that diminish educational quality. While enhanced training can boost outcomes, especially in math and science, disparities across regions impact effectiveness (Ngubane, 2024). The training of TVET teachers reveals gaps in preparing graduates with the skills needed to meet

the diverse needs of learners, particularly in disadvantaged contexts (Zinn et al., 2019). The inconsistency of professional development programmes hampers teachers' abilities to introduce updated methodologies and respond effectively to their students' needs (Marishane, 2014).

Many teachers struggle to engage effectively in multilingual education due to insufficient training and limited resources (Hlengwa-Selepe, 2024). Existing professional development programmes often do not equip teachers with the skills needed to teach in linguistically diverse environments, as they are unable to focus on multilingual pedagogies (Carrim & Nkomo, 2023).

As the country transitions to a pedagogy of bilingual, mother-tongue education, both pre- and in-service teachers will require training to acknowledge and make the most of linguistic diversity in classrooms, playgrounds and sports, arts and culture spaces. In this regard, there is promising evidence about translanguaging practices (Omidire, 2019) and the authenticity across language and cultures (Stadler & Eloff, 2022) to equip South African teachers so that they can make the most of multilingualism as an asset and ensure high-quality education outcomes for South African students.

1.2.6 Early Childhood Education (ECE)

Early Childhood Education (ECE) plays a crucial role in addressing educational inequality and improving school readiness in South Africa. It is widely acknowledged that the early years of a child's life are critical for cognitive, emotional and social development, which lay the foundation for future learning and success. ECE programmes aim to provide young children with the support needed to develop these skills, ensuring they are ready for formal schooling and better equipped to navigate future educational challenges (Britto, Yoshikawa & Boller, 2011).

Socio-economic disparities are a major barrier to accessing ECE services. Children from low-income families continue to face significant barriers to accessing quality ECE services. While free public ECE programmes have expanded, many children from poorer and rural households are still unable to attend due to indirect costs (such as transport) or the lack of nearby ECE centres. Where students have access to ECE centres, the quality of services is inconsistent, with many centres lacking resources, trained staff and adequate infrastructure. The absence of well-trained teachers and appropriate learning materials further exacerbates these challenges, limiting children's potential for growth during their critical early years (Aina & Bipath, 2022). National data from 2023, shown in Table 12, shows that nationwide two-thirds (61.1%) of children aged 0–4 stayed home with a parent, guardian or another adult. This figure was most pronounced in KwaZulu-Natal (72.8%) and Northern Cape (69.2%). Only 33.6% of children in this age group attended formal ECE facilities nationwide. Attendance of ECE facilities was most common in Gauteng (40.6%) and Western Cape (39.4%) and least common in KwaZulu-Natal (23.8%) and Northern Cape (25.4%).

This inequity contributes to a gap in school readiness between children from higher-income and lower-income families (DBE, 2024). School readiness assessments revealed that approximately 70% of children entering grade 1 in 2024 demonstrated the necessary cognitive and social skills, an improvement from 60% in 2017. However, children from rural and disadvantaged areas continued to show lower levels of readiness compared with their urban counterparts, largely due to uneven access to quality ECE programmes. Not attending ECE influences the cognitive, social and emotional development of students and affects their long-term educational trajectories (Aina & Bipath, 2022). The lack of affordable and accessible ECE services perpetuates cycles of poverty and inequality, putting children at a disadvantage as they enter formal schooling (Aina & Bipath, 2022).

Care arrangements for children aged 0-4 years	Province (Per cent)									
	WC	EC	NC	FC	KZN	NW	GP	MP	LP	RSA
Grade R, Pre-school, nursery school, crèche, edu-care centre	39.4	30.8	25.4	36.5	23.8	30.3	40.6	31.6	38.4	33.6
Day mother	7.8	1.3	3.7	7.6	2.1	0.0	4.6	2.2	8.8	4.1
At home with parent or guardian	45.5	56.0	60.3	51.7	62.0	64.6	48.4	57.8	47.4	54.0
At home with another adult	5.9	10.3	8.9	3.2	10.8	3.9	5.8	7.2	4.6	7.1
At home with someone younger than 18 years	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1
At somebody else's dwelling	1.4	1.4	1.2	1.0	1.1	1.2	0.5	1.2	0.6	1.0
Other	0.0	0.1	0.6	0.0	0.2	0.0	0.0	0.0	0.1	0.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 2 – Percentage (%) distribution of children aged 0—4 years that used different childcare arrangements by province

Source: General Household Survey 2023, https://www.statssa.gov.za/publications/P0318/GHS%202023%20Presentation.pdf

Students' access to quality ECE centres is inconsistent, with many centres lacking resources, trained staff and adequate infrastructure. Under-resourced ECE centres often fail to meet children's developmental needs, resulting in poor learning environments (Visser et al., 2021). The absence of well-trained teachers and appropriate learning materials further exacerbates these challenges, limiting children's potential for growth during their critical early years (Aina & Bipath, 2022).

Efforts by the South African government to expand ECE access through various policies have been hindered by fragmentation and poor coordination among government agencies responsible for ECE (Matjokana, 2024). This lack of cohesion has led to gaps in service delivery, particularly in rural and marginalised communities, where quality ECE services are most needed. Additionally, the focus on formal schooling often overshadows the importance of ECE, diverting resources away from ECE initiatives (Matjokana, 2024).

1.3 Conclusion: Challenges and opportunities associated with inequality in South African education

As a postcolonial, emerging economy that is transforming towards justice, South Africa has cumulative and chronic diversity issues that pose both challenges and opportunities for quality education. In this brief overview, we foreground the most prominent diversity issues as (i) poverty and structural inequality; (ii) youth employability; (iii) linguistic diversity; (iv) the rural-urban continuum; (v) teacher professional development opportunities; and (vi) a focus on early childhood education. The chapter explores the complexities of contextual and systemic diversity within the South African schooling system, highlighting the influence of factors such as poverty, linguistic diversity, teacher development, ECE, the rural-urban divide and youth employment on educational access and outcomes. While significant progress has been made in addressing historical inequities, particularly through progressive, pro-poor policies and curriculum reforms, challenges remain in creating an education system that is truly equitable and inclusive for all learners.

CHAPTER TWO
Responses to Challenges

BRAZIL

National Education Plan 2014-2025 and current education policies

1. Introduction: The National Education Plan as a guide for education policies

Brazil's federal Constitution stipulates that educational policies must be planned on the basis of ten-year National Education Plans (NEP). The current plan was approved in 2014 and has been extended until 2025.

The goals and directives of the NEP guide national policy and, given Brazil's federal context, also guide state and municipal plans for the decade. The policy analysis presented here will take into account the national guidelines.

The NEP is an axis that helps to understand the challenges and explore the policies underway based on national debates. In Brazil, the federal government coordinates this system and, in this context, the NEP for each decade lays out the horizon for the democratisation of education to be pursued by all federative units, as the states and municipalities commit to drawing up their ten-year plans in conjunction with the national plan.

Educational policies thus need to be understood in terms of the diversity of their national and sub-national scope. However, educational policies also respond to a wide range of political projects that dispute the project of human formation in the country. The country currently has 29 registered political parties (TSE, 2024), of which 19 are represented in the federal legislature, with eight holding the majority of representatives (BRASIL, 2024). These two elements, federative diversity and multipartyism, are important for understanding the creation of educational policy, which in Brazil is heavily regulated.

The current NEP was unanimously approved by the National Congress in 2014, the result of a broad participatory process carried out through the National Commission for Evaluation of Higher Education (CONAES), which precedes the approval of the plans and involves community teachers, school staff, managers, students, parents, and organised social movements.

2. Ten years of NEP: Results and challenges

The NEP 2014-2025 consists of 20 goals that are broken down into numerous strategies. The goals address challenges related to access to school, the conditions for the supply and management of education systems, and the quality of learning. In terms of funding education, there has been an increase in the federal government's involvement in basic education funding with the approval of the FUNDEB, an accounting fund that provides approximately USD 44 billion per year from sub-national governments. The federal government contributes an additional USD 8 billion per year (FNDE, 2024), which allows federal resources to reach the least developed education networks as part of a consistent strategy to combat educational inequalities in the country.

In terms of the supply of education, some challenges stand out. For example, the guarantee of early childhood education, especially from age zero to three years old, which is not compulsory, but is understood to be a child's right. In this age group in particular, inequalities in access are very marked between urban and rural areas and between social groups with different income profiles (BRASIL, 2024).

Another emblematic point about access concerns secondary education. Educational indicators show that only 76% of young people between the ages of 15 and 17 are enrolled in this stage, and if we consider the income profile, only 66% of young people from the poorest quintile attend secondary school. The dilemmas at this important stage of young people's education led to an intense debate promoted by the Ministry of Education in 2023 to evaluate the reform imposed in 2017. This discussion resulted in a new reform, which will come into force in 2025. As a result of the reform, the articulation between basic general education and formative itineraries in the three-year high school curriculum will be resumed.

Faced with the challenges of this project, but above all the recognition that there are major socio-economic barriers to young people staying in school, in 2024 the Ministry of Education proposed an incentive programme called 'Pé de meia', which supports students with a monthly grant to attend school, as well as a supplement to be received on completion of a particular stage of education. In terms of school quality, there has been a series of debates about how to best organise curriculum, especially in secondary education. In 2023, new regulations were approved for secondary schools, with an emphasis on a commitment to general basic education and an increase in vocational education opportunities.

The responsibility for providing secondary education in Brazil lies with the states, while the incentive programme is federal. As such, local and national policies overlap in order to find answers to the challenge of training young people.

In terms of supply, an important goal in the NEP is the expansion of the school day to a full day of education. This is a major challenge for the country, as only 20.6% of Brazilian students have access to full-time education (BRASIL, 2024). In early childhood education, 30% of enrolments are at full-day schools, while in primary and secondary education this percentage is less than 20% (BRASIL, 2024). This is a challenge for sub-national systems, but is also an important national agenda, and there are federal incentive programmes for this purpose. The Full-Time School programme encourages the creation of full-time enrolments

(equal to or greater than seven hours a day or 35 hours a week) in all stages and modalities of basic education, with technical and financial assistance from the federal government (BRASIL, 2024).

Another fundamental issue in how education is provided, which is linked to the management of the systems themselves, is the valorisation of education professionals. Brazil still has problems with teacher training, with approximately 60% of basic education teachers having higher education qualifications and working in their area of training (BRASIL, 2024).

In addition to training problems, Brazilian teachers receive approximately 85% of the pay of other professionals with the same type of training (BRASIL, 2024). These dilemmas result in a level of appeal for teaching as a profession and a high turnover rate in education systems. The goals of the current NEP and the debate on the next NEP have highlighted this aspect as a structural issue that can only be resolved in Brazil with coordinated actions between the country's federative units. One way of tackling this dilemma is to establish a National Professional Salary Floor.

Teacher appreciation is also a major challenge in Brazil. To this end, the country has a structural policy of setting an annual National Professional Salary Floor for teachers to ensure a minimum level of financial compensation. The Ministry of Education has just launched an incentive programme for access to teacher training courses. This involves an incentive scholarship programme for undergraduate students, which aims to accompany their training and keep recent graduates in public schools.

Following the release of a series of monitoring reports, as well as the National Education Conference in 2024, Brazil's current major challenge is the approval of Bill No. 2.614/2024, which establishes the new national education plan for the ten-year period of 2024-2034.

The original draft of the new plan consists of 18 objectives, 58 goals and 253 strategies. The bill will be considered by the Chamber of Deputies and the Federal Senate. In this sense, the current trend is one of mobilisation to ensure its approval and the strategic planning of Brazilian education.

The approval of the new NEP once again requires the States, Federal District and Municipalities to coordinate their efforts in order to draw up the new ten-year education plans and strengthen the system of collaboration between the federative units in implementing the strategies of the NEP.

Another major challenge is the approval of the NES, which could do much to create stability and maintain educational policies in the country.

In order to meet the challenges of access and quality, there are a number of policies and programmes underway, especially those formulated in the last two years.

Below is a summary of the challenges:

- **Increasing public investment:** Public investment in education needs to be increased, particularly to enhance the quality standards of the system's offerings.
- **Expanding regulation:** It is essential to expand the regulation of the NES. This is a fundamental strategy that aims to coordinate the educational course in a federative country like Brazil, where numerous issues require democratic negotiations between different government bodies for effective policy design.
- **Valuing education professionals:** Ensuring that education professionals are properly valued is crucial. This includes providing appropriate training in higher education, making their career attractive through competitive salaries and working conditions, and supporting teacher autonomy in pedagogical practice.
- **Ensuring quality secondary education:** Young people need to be provided with access to secondary education that guarantees a common basic education, while also addressing their desire for meaningful, high-quality and autonomous learning experiences. This requires overcoming the structural inequalities exacerbated by the 2017 reform.
- **Democratising access to full-time schools:** It is essential to democratise access to full-time schools that offer inclusive, emancipatory and high-quality educational projects.

These points do not cover the entire debate, but highlight elements that are sometimes overlooked in the summaries presented in international agendas surrounding large-scale assessments.

3. Future horizons

The set of challenges facing Brazilian education, together with historical challenges such as those highlighted above, also consists of the need to face challenges with a view to the future.

Climate change has imposed itself as a multi-faceted challenge in Brazil. Education has a fundamental role to play in tackling the environmental emergency and the transition to a new economic and social model. In this sense, there is an urgent need to build policies that promote the intersectoral articulation of education for the environment, including and based on environmental education, education for sustainable development (ESD), scientific and technological education, education aimed at disaster preparedness and prevention at all stages, modalities and levels of the country's educational institutions and the policy for training education professionals.

From this perspective, the country needs education that not only aims to change the behaviour of individuals, although this is important, but that helps to build another model of sustainable and inclusive economic and socio-environmental development.

In short, we need to act firmly and urgently by integrating education, science and sustainability actions through public policies.

In addition, intersectorality is becoming a fundamental aspect in the development of educational policies. Intersectoral policies are social protection policies that can induce sustainable transformations in favour of equity. Intersectoral coordination can contribute to the realisation of public policies that affect fundamental rights such as health and education. Joint planning and the shared use of public equipment networks can be utilised, above all, as a strategy for overcoming inter-institutional and intersectoral inequalities.

Moreover, the use of new forms of AI based technologies and their uneven introduction at schools leads to educational inequality. These elements mean that traditional debates on results based on a simple reading of international indicators, which do not consider the contexts in which educational systems are produced in their multiple dimensions, have led to the circulation of policy solutions that do not tackle local problems in a creative way and in dialogue with the educational community.

Teachers are at the heart of these challenges, as they are fundamental to the realisation of the right to school level education. The new NEP aims to tackle the problem of the low level of appeal of the teaching profession in the country with more support for the training process in higher education and ensure that teachers work in the areas in which they are actually trained. To make progress on the issue of attractiveness, professional integration needs to be linked to improving working conditions, which are still extremely unequal in the Brazilian federative context.

The challenges faced by Brazil are further examples of those of the Global South, and we believe that progress on many of these issues can be driven by international coordination and confrontation.

RUSSIA

Focus on the quality of education

Like many other educational systems around the world, the Russian education system is facing modern challenges because of the rapid pace of technological development. It is important to take these challenges into consideration and solve problems that arise from them, which is a significant factor in determining the priorities for the future development of Russian education as an integrated system. On the other hand, achieving a new level of quality is impossible without improving the effectiveness of how traditional educational issues, such as regularly updating and modernising federal state educational standards, are addressed in order to ensure that students' education meets current requirements, develop student talent, provide access to high-quality education and overcome inequalities caused by socio-economic, ethnocultural or other factors.

The quality of education is a strategic priority of the Russian Federation, and the term "quality" is defined in the law on education in Russia. The National Education Project was one of the key initiatives of the Russian government for the period from 2019 to 2024. One of its key goals was to ensure that Russia ranks among the top 10 educational leaders in the world. To achieve this goal, the project focused on comparative international studies of Trends in Mathematics and Science Study (TIMSS), Progress in International Reading Literacy Study (PIRLS) and Programme for International Student Assessment (PISA) as examples of the practice of international research on the quality of student training. Based on the results of these studies, a special approach to measuring the international position of the Russian Federation was introduced.

From 2019 to 2024, a representative sample of 1,500 schools participated in the study annually. The results were provided individually for each school and region. Based on the country report, special management measures were developed and targeted decisions were made.

Since 2022, national approaches to assessing the effectiveness of education and functional literacy were introduced, which have continued to provide reliable and internationally comparable information about the education system. Throughout the project, the main focus remained on practical actions, such as providing reliable data on the quality of education in each region of the country.

This complex approach to quality measurement during the National Project resulted in the development of regional analytics and data-driven policies, support for schools and teachers to work with evidence-based approaches in order to improve student outcomes, the provision of valuable information about the learning environment at schools by collecting contextual data about students, teachers, principals and families and greater empowerment for policies and actions.

The main outcome of the project is that the Russian Federation joined the top 10 educational leaders throughout the world and improved the level of functional literacy among students in each region. According to the results of PISA 2018, roughly one in five schoolchildren fails to reach the basic level of functional literacy in reading, science or math (FIEEQ, 2018). Between 2015 and 2018, students from low socio-economic status families showed the largest decline in results and the largest increase in the proportion of functionally illiterate students. The stable segment of schools with low educational results is becoming a significant challenge for Russian education. As a result of the National Education Project, the share of low performing students decreased to 10% (FIEEQ, 2023).

Ensuring the country's competitiveness and technological sovereignty is another key challenge facing Russian education today. Special attention is paid to issues surrounding the in-depth study of STEM subjects. At present, the share of students enrolled in in-depth programmes at the lower secondary school level is a little more than 11%, while profile education in high school covers 82.5% of children. Technological and socio-economic profiles are the most common specialisations, with about 34.2% of children studying in such classes. In recent years, the coverage of extracurricular technical and natural science programmes has been increasing.

In 2025, Russia is preparing a large-scale Strategy for the Development of Education for the period until 2040. As part of this strategy, challenges and new developmental tasks will be identified, and the implementation plan will involve new national projects that build on the achievements of the educational system and its traditions.

Ensuring the equitable nature of general education

The pronounced differences in the economic capabilities of Russia's regions, living and working conditions in urban and rural areas, and the social differentiation of the population create various forms of educational inequality in general education. At the current stage, the fundamental principle of Russia's education system is 'equity', which means that each child should have access to quality education according to their abilities and interests, regardless of their place of residence (city or village), whether they attend a state or a private school or their family's social status or income. The principle of equity is particularly important in the context of a demographic decline, where the value of each child's educational success and self-realisation is increasing.

A unified educational space is also being formed in Russian schools through the introduction of unified content education. This approach, which allowed for variability in educational programmes, textbooks, and school and teacher autonomy in their choices and was introduced during the post-Soviet period as a replacement for the standardised Soviet school, was rejected as it created risks for equal opportunities among students in different schools and regions.

The formation of a "unified educational space" in secondary education aims to ensure equity, with unified requirements for educational content, the organisation of the educational environment, the level of teachers' professional expertise, programmes and textbooks, and opportunities for extracurricular education. Unified educational programmes have been approved for all subjects. A single line of state textbooks, which are provided to students free of charge, is currently being created. As part of this process, the School of the Ministry of Education project was developed and is being implemented to provide unified standards for learning conditions, education, upbringing, extracurricular education and school climate. Schools participating in this project conduct self-assessments of their conditions according to the parameters set out in the model and create a programme to address existing shortcomings.

The National Education Project that ran from 2018-204 addressed the task of levelling conditions for school education. As part of the project, infrastructure projects were implemented with co-financing at both the national and regional levels, including the construction of new schools, major renovations or the reconstruction of old ones, as well as the provision of modern educational equipment and digital technology. In particular, the project established 'Growth Points' in rural areas to address the gap in academic achievement between urban and rural students and to foster modern skills in STEM fields. Barriers hindering access to education for students in remote and sparsely populated rural areas were addressed through federal budget-funded projects to purchase school buses. Future plans include providing buses to all schools, making excursions and field trips more accessible and organising free meals for students in grades 1-4 at Russian schools under the national programme. The national project has successfully addressed the organisation of free hot meals for all students in grades 1-4 at Russian schools.

Hiring skilled professionals is a key factor for the quality education of students. Over the last decade, various federal projects and programmes have addressed the challenge of ensuring that all Russian schools have highly qualified teachers. A professional standard was introduced that establishes high qualification requirements for teachers. Since 2012, it has been mandatory for teachers to undergo professional development courses at least once every three years. Starting in 2023, all graduates of pedagogical programmes who are starting school employment are required to undergo certification. Various tools for assessing teacher' expertise are being developed, including educational and ICT competencies. Diagnostics are being used to create a system of scientific and methodological support for teachers and managers that offers teachers programmes to improve their qualifications based on shortcomings that have been identified in their work and current priorities such as education, work in inclusive classrooms and ICT. The next step will be the transition to personalised AI-supported systems of professional development and career growth.

The growing shortage of teachers in recent years has disrupted the principle of equal educational opportunities for children and prompted the government to adopt additional measures, including:

- Allowing senior university students to teach at schools
- Increasing the number of state-funded placements at pedagogical universities
- Opening specialised psychological and pedagogical classes at schools to motivate students to pursue teaching professions

To increase the influx of university graduates into schools, young teachers are provided with benefits and subsidies, including assistance with buying housing. To attract teachers to rural schools, Russia has been implementing the Rural Teacher project since 2020. Teachers sign a five-year contract and receive RUB 1 million (RUB 2 million in the Far East) and benefits to purchase or rent housing.

Salaries are a major factor in the appeal of the teaching profession. Their size is highly differentiated across the country's regions. This reduces the influx of young teachers and leads to the migration of more experienced ones. The government has proposed plans to change the remuneration system for teachers by introducing unified requirements that would increase the base level, make it more stable and have transparent calculation mechanisms.

There are plans to develop digital services to facilitate teachers' work. This includes creating a digital system to recruit and retrain personnel for available teaching vacancies.

Another focus of the equity policy is to support schools that operate in challenging conditions and schools with low educational outcomes. Local projects for this purpose have been initiated at the federal and regional levels since 2016. From 2020 to 2022, the nationwide 500+ project was implemented to provide targeted assistance to schools and students facing learning difficulties.

There have been changes in the approaches to addressing the challenge of the growing numbers of migrant children at Russian schools. In the past, the schools themselves were responsible for ensuring their educational success, as well as their social and cultural integration. Schools faced a lack of teachers' competencies, readiness and resources to organise extracurricular classes. From 2025, migrant families have been responsible for ensuring that their children know the Russian language, with mandatory testing for language skills being introduced as a requirement for admission to school.

Russia consistently adheres to the principle of inclusivity in secondary education. The rights of children with special educational needs and disabilities (SEN) to study at regular schools are enshrined in law, and schools have improved physical accessibility conditions over the last decade. A federal educational standard for students with SEN was approved, adaptive educational programmes have been institutionalised, special textbooks have been created and specific requirements have been introduced in the professional standards for teachers. Training and professional development for teachers who work with students with disabilities and SEN are organised. Special funding standards have been created for students with disabilities and SEN. The network of special schools was actively reduced initially, but then this process was halted to give families the choice of special school education. At the current stage, it is crucial to ensure that the guarantees set at the national level are met in all regions, that all teachers in inclusive classrooms receive adequate training and that inclusive schools have special education tutors, psychologists and specialists.

Extracurricular activities and extracurricular education are used to create equal opportunities for children. Pedagogical support is provided as part of extracurricular activities. This includes: extracurricular classes for students experiencing difficulties in mastering the curriculum; extracurricular classes for students facing challenges in learning the language of instruction; specialised classes for students encountering problems in social communication; and special classes for students with disabilities.

Federal extracurricular education projects have been implemented to include rural children in activities, including through the creation of the appropriate conditions in schools and the provision of mobile STEM centres. As a result of the implementation of national projects and programmes for the development of Russian education, more than 80% of schoolchildren are now covered by extracurricular education programmes. The Concept for the Development of Extracurricular Educational Programmes for Children until 2030 focuses on continuous efforts to bridge the gap between urban and rural schoolchildren and expand opportunities for children with special needs.

Digitalisation is both a challenge and a powerful opportunity to build a more equitable education system. On the one hand, introducing digital technologies requires overcoming infrastructural constraints, retraining teachers and addressing issues concerning digital inequality and data protection, which creates a burden on educational institutions. On the other hand, it opens up unique opportunities by providing personalised learning through adaptive platforms and access to advanced educational resources, interactive formats and hybrid models that cover any distance.

The digital infrastructure of schools has been significantly modernised as part of the National Education Project from 2018 to 2024 and taking into account lessons learned from the pandemic. Unified online services for schools, which are part of the unified digital educational environment, have been created and continue to evolve. These services include tools and content for educators and administrators, as well as for students and their parents.

The key task in this regard is not just to introduce technologies mechanically, but to also rethink approaches, while preserving the equity and human-centricity of education. A short-term goal is to introduce a digital portfolio for students that collects information on educational and moral development, extracurricular activities and other achievements.

Strengthening the educational functions of general and extracurricular education

Strengthening the educational functions of general and extracurricular education has become a priority in educational policy over the past decade. Significant attention was paid to education in the Soviet school system. During the post-Soviet period, the educational function of schools was sidelined as part of the process of de-ideologising education. Today, this is seen as a cause of negative phenomena both within school communities (discipline violations, bullying and student-teacher conflicts) and in society as a whole (alcohol and drug use, crime, declining birth rate and reduced levels of solidarity and mutual assistance).

In 2015, the Russian government adopted the Strategy for the Development of Upbringing in the Russian Federation for the Period until 2025. The strategy defined the main priorities of state policy in the upbringing and socialisation of children and outlined mechanisms and focuses for the work of educational organisations. The primary goals of upbringing are to foster healthy, happy, free-minded and labour-oriented young people; to develop spiritual and moral values in children and young people; to shape their historical, cultural and civic identity; to instill national values; and to preserve traditional values. In 2020, the concepts and importance of upbringing were enshrined in the federal law on education in the Russian Federation. The state educational standards introduced an educational component and upbringing programmes in all areas: civic, patriotic, spiritual and moral, aesthetic, physical, labour and ecological education as well as values of scientific knowledge. Starting from the 2021/2022 academic year, Russian schools have appointed advisers to the director for upbringing and interaction with children's public organisations. They organise educational activities, bring external partners to schools to speak about upbringing issues and work directly with children of various categories, from activists to socially disadvantaged students.

The government views upbringing within the education system as a factor that can consolidate society and ensure national security. The education of patriotic and socially responsible individuals is included in the national development goals of the Russian Federation for the period until 2030 and beyond to 2036. The shaping of a national identity and patriotism is being implemented both through academic subjects (with a special focus on the country's history) and as part of extracurricular activities and extracurricular education. At each school, the school week begins with a ceremonial flag-raising and singing of the anthem. Lessons titled 'Conversations about Important Matters' are conducted to expand children's knowledge of native history and culture, as well as the challenges Russia faces, and to foster a sense of responsibility for the country's present and future. Each school has cells of the 'Movement of the First', a Russian social-state movement of children and youth that was founded in 2022. The movement provides education for children, arranges leisure activities for teenagers and creates worldviews "based on traditional Russian spiritual and moral values." This movement draws inspiration from the mass pioneer organisation that existed during the USSR.

Given the country's ethnic and cultural diversity, cultural and linguistic policies in education play a special role in ensuring interethnic and interreligious harmony. As part of the language policy in education, the state seeks to strike a balance between strengthening Russian as the state language, ensuring citizens' rights to use their native languages and preserving national languages, including those of Indigenous and small ethnic groups. For this purpose, study schedules allocate specific hours for learning Russian, the state languages of the republics and the native languages of Russia's peoples. Special attention is paid to supporting the languages of small ethnic groups, including in the digital space, with the development of mobile applications, fonts, keyboard layouts and software localization. Olympiads and competitions are organised for schoolchildren in an effort to popularise native languages. Policies for preserving cultural heritage and the traditions of Russia's diverse peoples include studying local history and spiritual and moral values, and also engaging in arts, crafts, sports and other forms of extracurricular activities.

Using education to establish a healthy lifestyle and family values is seen as a contribution to achieving the country's current demographic goals. Schoolchildren are required to meet physical fitness standards as part of the Russian physical culture and sports complex 'Ready for Labour and Defense' (GTO norms), which provides additional bonuses for university admission. From the 2024/2025 school year, Russian schools have begun teaching the subject 'Family Studies' in grades 5-9. Labour education is returning to schools through such practices as self-service, socially useful work (keeping school premises and yards clean) and updating the content of the subject 'Labour (Technology)'. Volunteering has become an integral part of school education in recent years. Participation in Olympiads, conferences and research projects helps foster values of scientific knowledge among students. The new Strategy for Education in Russia until 2040 specifically focuses on educational work to develop a culture of informed information consumption and internet security.

Compulsory education to develop human resources for technological sovereignty

By 2040, there will continue to be significant demand for highly skilled professionals who are capable of ensuring technological breakthroughs, sustainable development and national sovereignty in the face of global competition.

To meet these needs, it is crucial to modernise the professional education system, strengthen cooperation between universities, research centres and businesses, and create conditions for the continuous training and retraining of specialists. It is equally important to improve the quality of science education and to increase the number of students who choose this field as a professional career.

Alongside the need for personnel in breakthrough scientific and technological development, there has been growing demand for personnel in the industrial sector in recent years. The government is implementing extensive programmes to develop secondary vocational education. The vocational track is becoming increasingly attractive to graduates of primary and secondary schools due to this demand and the rising wage levels in the industrial sector and service economy.

Early career guidance for schoolchildren is viewed as a mechanism for identifying and developing students' abilities and shaping their conscious choice about their future profession, taking into account the needs of both the state and the economy. Since 2023, Russian schools have been utilising a unified career guidance model called 'profminimum' for students in grades 6-11. The programme includes specialised and pre-professional classes in areas such as engineering, medicine, space science, information technology, teaching, business and other high-demand fields. Mathematics is the most common specialisation. Career guidance is integrated into the subject content of core educational programme lessons and extracurricular activities. Enterprises and organisations are conducting professional trials, and supplementary education programmes with a focus on specific professional fields are being introduced. Some schools offer vocational training courses that provide initial professional skills for such jobs as a camp counselor, seamstress or driver.

The STEM are regarded as disciplines that are essential for preparing students to choose the professions needed for Russia's economic development and to enhance its international competitiveness. To increase the effectiveness of STEM education, schools are equipped with new, modern equipment for physics, biology and chemistry classrooms, along with computer technology and software for virtual laboratories and robotics activities. Multifunctional resource-based educational centres (experimentariums and laboratories) are being established at universities for collective use, including by schoolchildren. These centres are equipped with experimental and high-tech equipment that is essential to demonstrating and studying modern educational technologies. Over the past years, Russia has established more than 300 'Quantorium' technology parks, including those based at schools, and 182 'IT Cube' digital education centres. They collaborate with regional enterprises and provide modern tools for science and technology clubs.

To educate highly motivated and talented students, Russia plans to establish a network of advanced schools across its regions in the near future. These schools will utilise the best teaching technologies and methods, with the most qualified personnel focusing on priority science and technology subjects. A traditional feature of Russian educational policy is its focus on identifying and supporting talent. In recent years, special attention has been given to people who are talented in science and technology. Numerous contests, Olympiads and conferences support students' interest in related subjects. As a result of these efforts, Russian students consistently demonstrate high achievements at international Olympiads in mathematics, physics, chemistry and, in recent years, biology.

The growing emphasis on engineering, technical and technological education heightens requirements for the proper training of teachers. Pedagogical universities are establishing educational technoparks — learning environments equipped with high-tech equipment where students are trained in methodologies and technologies for teaching natural science and technology-oriented subjects.

Strategy 2040

To effectively respond to local challenges and global trends, the Russian Federation requires strategic and innovative approaches for the development of education. In 2024-2025, Russia is working on a strategy for the development of education for the period until 2040 (Strategy 2040). Strategy 2040 is a top-level document that will shape Russia's educational policy for the coming decades. This document is expected to define the key focuses, goals, mechanisms and measures for the transformation of the educational system, taking into account global challenges and national priorities.

Equity remains one of the key values of the education system. Strategy 2040 aims to ensure equal access to quality education for all citizens, regardless of their social and economic status. This involves improving the infrastructure of educational institutions, particularly in remote regions, introducing modern technologies into the educational process and expanding the use of digital solutions in education. Moral training is a cornerstone of Strategy 2040, reflecting the growing recognition of the need to cultivate not only academic excellence but also social responsibility, a sense of patriotism and an eagerness to stand up for Russia's national interests.

Assessing the quality of education is especially important for Strategy 2040 and also quite difficult because it needs to take into account the diversity of educational outcomes at different levels — from pre-school to higher, continuing and postgraduate education.

Often, the emphasis on assessing the quality of education focuses on academic achievements while ignoring such aspects as soft skills development, creative potential and value orientations. Standardised approaches also do not take into account specific types of education such as vocational or technical education. This creates a need for more flexible and comprehensive methods of assessment that reflect students' real achievements and support their personal development while meeting the goals of society's sustainable development.

As part of discussions about Strategy 2040, a proposal was made to create a national education quality index, a tool that would allow for obtaining reliable information about the quality of education at each level and across regions and municipalities, without increasing the burden on participants in educational relations, primarily teachers and students.

A discussion has also been initiated as part of Strategy 2040 about the feasibility of creating a new system for the international assessment of the quality of education for BRICS countries, taking into account their unique educational and cultural features. The successful implementation of this initiative could not only strengthen the position of BRICS in the global education agenda, but also offer the world new approaches to assessing the quality of education with a focus on multipolarity and sustainable development.

An equally important aspect is to strengthen the link between the education system and the labour market. Strategy 2040 calls for strengthening cooperation with employers to create educational programmes that adequately reflect the needs of the economy. The introduction of on-the-job training will facilitate the training of specialists by not only providing them with theoretical knowledge, but also practical skills, which will increase their competitiveness in the international arena.

Strategy 2040 focuses on the need to eliminate barriers that restrict access to quality education, as well as the seamless nature of education, i.e., a smooth transition between levels of education and entry into the labour market.

Strategy 2040 is an ambitious project that aims to create a dynamic and sustainable educational system. It could not only be used to educate highly qualified specialists and responsible citizens, but also to strengthen the international prestige of the Russian educational system, making it more attractive to international students, researchers and scholars.

INDIA

Overview

India's school education system is rooted in the country's socio-cultural context. National policy dictates that education has a definitive impact on the overall development of individuals, families, communities and the country as a whole. In a republic state, policies are crafted by the government, which implies that they are conceptualised with a vision to enhance the quality of life of every citizen in the country.

India has been empowering knowledge traditions for nearly the past 5,000 years. Historical accounts by the people of India and travellers from different parts of the world have confirmed that the structure, planning and organisation of education for school-age children was well established here and was a joint responsibility shared by the community, family and the government. Education in India is not immune to the impact of government policies. The dramatic impact of education policies from the colonial period is also evident. In 1835, Lord Macaulay, a representative of the British government, announced a policy, popularly known as the Macaulay minutes, which emphasised creating educated people who were "Indian by blood and colour, but English by likes, beliefs, morality and intellect". This policy aimed to create an administrative work force for the British rulers. However, it also had major consequences in terms of the acculturation and cultural uprooting of the people of India. In another instance, the education policy that was conceptualised in 1986 emphasised the integration of computers into school and higher education. In subsequent years, the impact of this policy can be seen worldwide, as people from India hold a major percentage of STEM-related jobs, including leadership positions at global technology giants. Both these examples illustrate the significance of education policy in defining the growth and development of a nation. India recently adopted the NEP in 2020. It is based on critiques of the purpose of education in earlier policies wherein people were trained solely as human resources. In fact, in 1985, the Indian Ministry of Education was named the Ministry of Human Resource Development (MHRD), and just after the NEP was adopted on 29 July2020, it was renamed the Ministry of Education on 14 August 2020 . The name change is crucial to understanding the paradigm shift in defining the purpose of education. The NEP 2020 redefines the purpose of education as being twofold: the development of one's inner self, rooted with pride in the cultural context along with possessing 21st century life skills and professional expertise. Its impact on overall education in India is evident even in just the short span of four years, which is also addressed in chapter one.

National Education Policy (NEP 2020)

The NEP was adopted on 29 July 2020. This policy envisions an education system that is rooted in Indian ethos and helps to directly transform India into a global knowledge superpower with a curriculum and pedagogy that ensures a deep sense of respect among students towards the fundamental duties and values of the Constitution, bonding with one's country and a conscious awareness of one's roles and responsibilities in a changing world (Pg. 6, NEP 2020). The policy is written in four sections: School Education; Higher Education; Key Areas of Focus (which includes Professional Education, Adult Education and Life Long Learning, Promotion of Indian Languages, Arts and Culture, Technology Use and Integration, and Online and Digital Education: Ensuring Equitable Use of Technology); and Making It Happen (which includes Strengthening the Central Advisory Board of Education, Financing: Affordable and Quality Education for All, and Implementation). This is the first policy in the post-colonial period that has methodically synchronised all the stages of education, including pre-primary and adult education. The existing gaps were critically examined in the policy, which has provided an educational framework to address these gaps with a futuristic approach that meaningfully engages all the stakeholders in the learning process.

The issues and challenges addressed in chapter one are duly acknowledged in the policy, which proposes workable pathways for transforming the educational landscape of India.

Gross enrolment ratio and dropouts

Chapter 1 addresses issues related to the large number of children who do not attend school in India, their enrolment, dropout rates as well as the measures taken as part of the NEP 2020 to ensure access to education at all levels. The inaccessibility of education and dropout rates can be seen as a composite issue that arises from a lack of resources, including infrastructure and teachers, the socio-economic circumstances of students and families, and the lack of vocational education in middle school.

Two major policy initiatives were discussed to curtail the existing trends in enrolment across various stages of school.

> The first is to provide effective and sufficient infrastructure so that all students have access to safe and engaging school education at all levels from pre-primary school to Grade 12 [...] The second is to achieve universal participation in school by carefully tracking students, as well as their learning levels, in order to ensure that they (a) are enrolled in and attending school, and (b) have suitable opportunities to catch up and re-enter school in case they have fallen behind or dropped out. (Clauses 3.2 and 3.3, NEP 2020)

SEDGs, including gender and disability

The policy places specific emphasis on education for children coming from Socio-Economically Disadvantaged Groups (SEDGs). This encompasses a wide spectrum of people.

SEDGs can be broadly categorised based on gender identities (particularly female and transgender individuals), socio-cultural identities (such as Scheduled Castes, Scheduled Tribes, Other Backward Classes (OBCs), and minorities), geographical identities (such as students from

villages, small towns and aspirational districts), disabilities (including learning disabilities) and socio-economic conditions (such as migrant communities, low income households, children in vulnerable situations, victims of or children of victims of trafficking, orphans, including child beggars, in urban areas, and the urban poor (Clause 6.2, NEP 2020).

Gender is recognised as an intersectionality across all SEDGs. The policy proposes establishing a 'Gender-Inclusion Fund' and an 'Inclusion Fund' to eliminate any remaining disparity in access to education (including vocational education) for children from any gender or other SEDG.

The policy emphasises the role of Open and Distance Learning (ODL) Programmes offered by the National Institute of Open Schooling (NIOS) and State Open Schools to provide much needed flexibility of timings and accessibility (Clause 3.5, NEP 2020)

The policy proposes building more residential schools for children from remote areas. These include Jawahar Navodaya Vidyalayas and Kasturba Gandhi Balika Vidyalayas (for girls only). Multiple other aspects of schooling including the school ethos are discussed in the policy (Clause 6.12 and 6.20, NEP 2020)

Tribal communities

The NEP 2020 acknowledges that the tribal communities and children from Scheduled Tribes also face disadvantages at multiple levels due to various historical and geographical factors. Children from tribal communities often find their school education irrelevant and foreign to their lives, both culturally and academically (Clause 6.2.3, NEP 2020).

The huge increase in the enrolment of children from tribal backgrounds at higher secondary level in the 2023-2024 academic year demonstrates the effectiveness of the NEP 2020. To provide quality learning experiences to tribal children, the Ministry of Tribal Affairs established different institutions, such as Ashram School and Eklavya Model Residential School. To strengthen the school-home connection, the proposal was made for the children's native language to be the medium of instruction and for adults from the community to be invited to school specifically as resources for various local arts and crafts and to motivate children in general. The NEP 2020 takes into consideration that the challenges associated with the inclusion of tribal communities are related to a stereotypical understanding of tribal culture and need to be addressed during teacher training programmes at both pre-service and in-service levels.

Children with special needs

Although the enrolment of CWSN at higher secondary institutions has nearly doubled from 247,788 in 2018-2019 to 404,592 in 2023-2024, it is still low, and most schools have a scarcity of infrastructure, trained teachers, special educators and counsellors. The policy pays exclusive attention to creating an inclusive ecology and providing quality learning experiences to all students with disability as advocated by the Rights of Persons with Disabilities (RPWD) Act 2016. This includes a mechanism for early identification, the development of accessible learning materials, including textbooks, technology-based intervention and the sharing of resources in a school complex (Clause 6.10-6.12, NEP 2020).

Rural areas

The majority of people in India, and by extension students, live in rural areas, and most of the quality education programmes for nurturing abilities are localised in urban areas. The NEP 2020 emphasises enhancing the resourcefulness of schools in rural areas.

Olympiads and competitions in various subjects will be conducted across the country; Efforts will be made to make these available in rural areas and in regional languages to ensure widespread participation (Clause 4.45, NEP 2020).

The policy proposes training local meritorious students, girls in particular, as teachers who will also serve as role models for others (Clause 5.2, NEP 2020) and setting up of libraries in rural areas to provide books and other learning materials to students with disabilities in such areas (Clause 21.9, NEP 2020) as yet another way to possibly increase the enrolment, retention and progression of students from rural areas.

Language learning and the medium of instruction

As noted in chapter one, India is a multilingual society. A child's home language and the prevalent language(s) in school, both as part of the curriculum as well as the language spoken by teachers, have a significant impact on the child's learning curve.

It is well understood that young children learn and grasp nontrivial concepts more quickly in their home language/mother tongue [...] Wherever possible, the medium of instruction until at least Grade 5, but preferably till Grade 8 and beyond, will be the home language/mother tongue/local language/regional language. Thereafter, the home/local language shall continue to be taught as a language wherever possible. This will be followed by both public and private schools (Clause 4.11, NEP 2020).

The first education commission (1964-1966) in post-colonial India recognised the multilingual nature of society and recommended Three Language Formulas, which mandated that each student should learn three languages in school. The NEP 2020 carried this further (Clause 4.13, NEP 2020) to include such foreign languages as Korean, Japanese, Thai, French, German,

Spanish, Portuguese and Russian (Clause 4.20, NEP 2020). The policy goes even further to address standardising Indian Sign Language along with local sign languages (Clause 4.22, NEP 2020). This once again reinforces the basic principle of the policy about creating inclusive learning spaces, cultural rootedness and global professional competence.

It is important to note here that the initiatives to promote Indian languages as a medium of instruction have started. Bachelor's degrees in technology programmes are offered in eleven regional languages by various institutions, including those of international repute. Such decisions provide strong evidence in support of the policy's provisions.

Technology and education

While the word technology is used 51 times across different parts of the policy, section 23 is devoted to explaining the multifaceted role of technology in strengthening the education landscape by supporting teacher preparation and professional development, enhancing educational access and streamlining educational planning, management, and administration including processes related to admissions, attendance, assessments, etc. (Clause 23.5, NEP 2020).

The policy mentions the need to plan teacher trainings to provide online and digital education. It also projects the need to develop affordable technologies to address the digital divide in the country. It is important that the use of technology for online and digital education adequately addresses concerns of equity (Clause 24.2, NEP 2020). The policy addresses the significance of creating a digital repository and fun-based learning games, as well as apps of Indian art and culture in multiple languages with clear operating instructions for children. The policy specifically focuses on developing technologies to facilitate and enhance the learning experiences of children with disabilities.

Vocational education

Based on the demographic dividend and need to create a skilled society, the policy has a dedicated chapter on vocational education.

This policy aims to overcome the social status hierarchy associated with vocational education and requires integration of vocational education programmes into mainstream education in all education institutions in a phased manner (Clause 16.4, NEP 2020)

The National Skills Qualifications Framework will be detailed further for each discipline vocation and profession. Further, this Framework will provide the basis for Recognition of Prior Learning. Through this, dropouts from the formal National Education Policy 2020 system will be reintegrated by aligning their practical experience with the relevant level of the Framework. The credit-based Framework will also facilitate mobility across 'general' and vocational education. (Clause 16.8, NEP 2020)

The policy aims to overcome the social status hierarchy associated with vocational education (Clause 16.4, NEP 2020), introduce a vocational education track from middle school to ensure that every child is trained in at least one vocation and align standards with the International Standard Classification of Occupations maintained by the International Labour Organization (Clause 16.8, NEP 2020). It also addresses the pathways for entering general education at every level.

Value education

In different contexts throughout the document, the policy promotes including value-based competencies across each domain, orienting teachers about the significance of values and incorporating a value-based approach to teaching and learning across each segment of education, including professional education.

[T]hese skills include: scientific temper and evidence-based thinking; creativity and innovativeness; sense of aesthetics and art; oral and written communication; health and nutrition; physical education, fitness, wellness, and sports; collaboration and teamwork; problem solving and logical reasoning; vocational exposure and skills; digital literacy, coding, and computational thinking; ethical and moral reasoning; knowledge and practice of human and Constitutional values; gender sensitivity; Fundamental Duties; citizenship skills and values; knowledge of India; environmental awareness including water and resource conservation, sanitation and hygiene; and current affairs and knowledge of critical issues facing local communities, States, the country, and the world. (Clause 4.23, NEP 2020)

Teacher training

The redefined curricular and pedagogical structure of school education has implications for teacher training programmes as well.

By 2030, the minimum degree qualification for teaching will be a 4-year integrated Bachelor of Education (B.Ed.) degree that teaches a range of knowledge content and pedagogy and includes strong practicum training in the form of student-teaching at local schools. (Clause 5.23, NEP 2020)

Consequently, in 2023, the NCTE launched four stage-specific Integrated Teacher Education Programmes (ITEP) based on the recommended curricular and pedagogical structure of school education. Along with ITEP, the post-graduation B.Ed. programme will also continue. This will be one- or two-year programme based on the nature and duration of the student's bachelor's programme.

It is a four-year dual-major programme that promotes a multidisciplinary approach to learning. Teacher preparation has been further strengthened with the introduction of National Professional Standards for Teachers (NPST).

> The NPST seek to fulfil NEP 2020's objectives of ensuring that all students have equitable access to the best possible education. (Page 1, NPST).

Another initiative is the National Mission for Mentoring (NMM), which was launched in accordance with Clause 15.11 of the NEP 2020. This programme booklet has been issued in 14 Indian Scheduled Languages along with an audio book and in Braille as well.

The policy critiques the prevailing hierarchy of subjects in the school system, which promotes a few certain subjects as being more important than others. The emphasis on experiential learning policy mandates the inclusion of art and aesthetics as an integral part of learning. Responding to this vision of the policy, the NCTE has launched four teacher training programmes in four different fields: ITEP Art Education, ITEP Sanskrit, ITEP Yoga and ITEP Physical Education, on the same line as ITEP for other school subjects.

Education funding

There has been a consistent increase in total budget allocations for education. This year, the total budget allocations for the Ministry of Education has reached almost INR 1.287 trillion, a 6.22% increase over the 2024-2025 academic year. The budget for the 2025-2026 academic year focuses on areas of critical reference, such as AI, innovation in education, digital repository, creating digital books for Indian languages, infrastructure and centres of excellence to equip youth with skills.

Other significant acts and plans

RTE: Right of Children to Free and Compulsory Education Act or Right to Education Act

This is an Act of the Indian Parliament that was enacted on 4 August 2009, which describes the modalities of the importance of free and compulsory education for children between the ages of 6 and 14 in India under Article 21a of the Indian Constitution. The Act makes education a fundamental right of every child between the ages of 6 and 14 and specifies minimum norms in middle schools. It requires all private schools to reserve 25% of seats for children from economically weaker backgrounds. Expenses on the education of these children are reimbursed by the state as part of a public-private partnership plan.

RPWD: Rights of Persons with Disabilities Act

This is a law that protects the rights of people with disabilities in India. It was passed in December 2016 and came into effect in June 2017. It includes twenty-one disabilities and aims to protect the dignity and rights of people with disabilities in all aspects of life; ensure that people with disabilities have equal opportunities and can live with dignity; mandates that establishments make their infrastructure and services accessible; and impose penalties for violating the Act's provisions.

Mid-Day Meal Scheme

This is a centrally sponsored scheme that has been in practice since 1995 with a view to enhancing enrolment, retention and attendance, while simultaneously improving nutritional levels among children. According to an amendment from 2017, it is compulsory for meals to be cooked hygienically in school or in a centralised kitchen in the case of a school cluster/ complex.

Initiatives to advocate for female students in school

To encourage the retention and progression of female students in school, different states have launched various initiatives. The first state to do this was Madhya Pradesh in 2007. It launched the Ladli Laxmi Yojana initiative, which involves depositing money in a girl's name that can be withdrawn once she is 21 years-old and unmarried. Such initiatives are launched to retain girls in school, discourage child marriages and help them become financially independent. Many states now have such initiatives with different names. This may also be a factor that contributes to the high GPI in India.

Initiatives to improve the quality of education

In recent decades, the government has launched numerous initiatives to improve the quality of education for every citizen of India. Below are some of them in alphabetic order.

Bharatiya Bhasha Samiti

The Bharatiya Bhasha Samiti (High Powered Committee for Promotion of Indian Languages) was established by the Ministry of Education and the Indian government in 2021. Its mandate is to explore and recommend pathways for the holistic and multi-disciplinary growth of Indian languages as envisaged in the NEP 2020. The committee has been also entrusted to advise the ministry on all matters pertaining to the revival of existing language teaching and research and its extension in various institutions of the country.

DIKSHA: Digital Infrastructure for Knowledge Sharing

The DIKSHA is a national platform for school education and an initiative of the NCERT under the aegis of the Ministry of Education.

IKS: Indian Knowledge Systems Division

The IKS Division of the Ministry of Education was established in October 2020 with a vision to promote interdisciplinary and transdisciplinary research on all aspects of IKS and to preserve and disseminate a deeper understanding and appreciation of IKS for further research and societal applications.

NHEQF: National Higher Education Qualifications Framework

As recommended by the NEP 2020, the University Grant Commission prepared the National Higher Education Qualifications Framework (NHEQF) in sync with the NSQF. The framework was launched in May 2023.

NCFSE: National Curriculum Framework for School Education

Founded as part of the principles and vision of the NEP 2020, the NCFSE (2023) provides a framework for the education of children aged 3 to 18.

NCVET: The National Council for Vocational Education and Training

The NCVET was established by the Ministry of Skill Development and Entrepreneurship and the Indian government as a regulatory body to perform the functions and responsibilities of the former National Skill Development Agency (NSDA) and National Council for Vocational Training (NCVT). It functions as an overarching national regulator that sets standards and formulates comprehensive regulations for vocational education, training and the skilling ecosystem in order to improve quality and outcomes.

NISHTHA: National Initiative for School Heads' and Teachers' Holistic Advancement

The NISHTHA is a capacity building programme to improving the quality of school education through integrated teacher training. It aims to build competencies among all teachers and school principals at different stages of schooling.

PARAKH: Performance Assessment, Review and Analysis of Knowledge for Holistic Development

The PARAKH National Assessment Centre was set up within the NCERT as an independent constituent unit on 8 February 2023 to fulfil the basic objectives of setting norms, standards and guidelines and to implement activities related to student assessment along with other tasks as mandated by Clause 4.4.1 of the NEP 2020. There are four major areas of focus for PARAKH: Capacity Development in Competency Based Assessment; Large-Scale Achievement Survey; Equivalence of School Boards; and Holistic Progress Cards for the Foundational, Preparatory, Middle and Secondary Stages.

PRASHAST: Pre-Assessment Holistic Screening Tool

The PRASHAST is a Disability Screening Checklist for Schools booklet and mobile app that covers 21 disabilities, including benchmark disabilities as per the RPWD Act 2016. This initiative facilitates early screening and is used to certify children with disabilities, as per the provisions of the Samagra Shiksha programme.

Samagra Shiksha

The Union budget for 2018-2019 proposed treating school education holistically without any segmentation from pre-nursery to grade 12. As such, Samagra Shiksha, an overarching programme for the school education sector extending from pre-school to grade 12, was prepared with the broader goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes. It absorbed the three former initiatives Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE).

SWAYAM: Study Webs of Active Learning for Young Aspiring Minds

The SWAYAM is a programme initiated by Indian government that is designed to achieve the three cardinal principles of Education Policy, namely access, equity and quality. This effort aims to bring the best teaching learning resources to everyone, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.

ULLAS: Understanding of Lifelong Learning for All in Society

The ULLAS is a centrally sponsored initiative that aligns with the NEP 2020. It aims to empower adults aged 15 and older from all backgrounds who missed out on formal schooling by helping them integrate into society and contribute to the nation's growth.

There are multiple other proposals in the NEP 2020 and other upcoming initiatives to strengthen India's education system for every citizen across all ages, including people who do not currently attend or who never had the opportunity to attend the school. This policy has made specific efforts to address the fragmentation of education across different stages, from pre-primary to higher education to adult education. It has broadened the scope of education at every level and focuses on developing expertise along with content mastery. The post-policy period has seen immense enthusiasm among various stakeholders, which led to preparation of an action plan and curriculum frameworks. Multiple bodies with focused mandates are constituted to smoothly implement this policy. Each policy initiative has a gestation period. The evolving population patterns, budget allocations for education and vibrant economy together with the core cultural value Vasudhaiva Kutumbakam ("the world is one family") are creating trajectories to build up India as an empowered society.

CHINA

Plans for Economic and Social Development of the People's Republic of China (hereafter the Five-Year Plans) are endorsed by the National People's Congress. The Five-Year Plans are formulated every five years and establish the central policy focuses for further reform and development over the next five years. This series of plans sets development goals for school education, which reflect the educational conditions in China over time.

The 10th Five-Year Plan (2001-2005) outlined the goals of accelerating education development, with a focus on developing all types of education at all levels and further reforming the education system (National People's Congress, 2001). The 11th Five-Year Plan (2006-2010) prioritised education development, emphasising the need to reinforce and make education compulsory for all, increase educational investment and continue reforms in the education system (National People's Congress, 2006). The 12th Five-Year Plan (2011-2015) called for further accelerating education reforms, with key goals including the development of all types of education at all levels, enhancing education equality, promoting well-rounded education and deepening systemic reforms (National People's Congress, 2011). Following 2016, two additional Five-Year Plans were formulated by the Chinese government, setting specific goals for education, as outlined below.

1. The 13th Five-Year Plan (2016-2020): Promoting the modernisation of education (National People's Congress, 2016)

To promote the balanced development of basic public education

The Plan proposed establishing a unified urban-rural funding mechanism for compulsory education with a focus on improving conditions in rural areas. It required increased public investment in education in the central and western regions, as well as in remote, economically disadvantaged and minority-inhabited areas. It pointed out the need for state-run schools providing compulsory education to comply with established educational standards, including improving conditions at underperforming schools and boarding schools, optimising the distribution of schools and eliminating large class sizes in urban areas. It aimed to balance the allocation of educational resources among schools within counties and meet the goal of raising the completion rate of compulsory education to 95%. The Plan underscored the importance of improving the quality of teachers, particularly in rural areas, and enhancing the teaching environment. It sought to address teacher shortages through government investments. The Plan envisioned a more accessible upper secondary education system with a proposal to raise the gross enrolment rate to 90% or more, while providing free upper secondary education for economically disadvantaged students identified through the household registration system. Additionally, the Plan encouraged increasing the availability of special needs education for groups with disabilities and proposed enhancing educational conditions and quality in this sector. It also called for the promotion of education for ethnic minority students by steadily implementing bilingual education and enhancing training programmes for bilingual teachers.

To build a learning society

The Plan emphasised developing continuing education and envisioned a system for lifelong learning and training that would be available to all members of society. It promoted online and distance education, encouraged the open sharing of learning resources and supported the integration of diverse digital educational resources in order to benefit society as a whole.

To enhance the vitality of the reform of education

The Plan proposed deepening educational reform to enhance students' sense of social responsibility, awareness of the law, spirit of innovation and practical abilities. It set out the goal of strengthening education in physical health, mental well-being and aesthetic appreciation, while enhancing students' innovative spirit and scientific literacy. The Plan emphasised further reform of examination and enrolment systems, as well as instructional methods. It sought to promote Academic Proficiency Test and Comprehensive Student Assessment in junior and upper secondary education. Additionally, the Plan detailed efforts to reform the professional job title system for elementary and secondary school teachers nationwide and improve teacher compensation. It supported the close integration of modern information technology with education and teaching. Moreover, it pointed out the need to ensure educational investment according to the law, separate educational governance from operation and evaluation, and expand the decision-making powers of schools. The Plan also proposed enhancing educational oversight and strengthening social supervision, along with a policy framework that encouraged categorised management and differentiated support. It encouraged non-state actors to provide a diverse range of educational services. Furthermore, it stressed the importance of improving the financial aid system across all levels and sectors of education to achieve full financial aid coverage for economically disadvantaged students.

2. The 14th Five-Year Plan (2021-2025) and Long-Range Objectives through the Year 2035: Reinforcing a high-quality education system (National People's Congress, 2021)

To promote the equality of basic public education

The most current Plan aims to further consolidate and advance the balanced development of compulsory education, improve education standards and close the urban-rural divide. It proposes expanding the scale of urban schools and ensuring that children of migrant workers have equal access to basic public education services. The Plan seeks to improve conditions at small-scale rural schools and boarding schools in towns, strengthen the ranks of teachers and enhance the quality of teaching staff in rural areas. It also pointed out the importance of improving the care system for left-behind children[36], thereby consolidating achievements in reducing dropout rates in compulsory education. In upper secondary education, the Plan aims to enhance accessibility, encourage diversified school development and raise the gross enrolment rate to over 92%. It also emphasises the standardisation of out-of-school training.

36 Left-behind children refers to children who live in their hometown, but do not live together with both their parents, since either one or both parents have migrated outside of the hometown to work for more than six months.

Additionally, the Plan requires that special education and specialised education be made more accessible, that the quality and standards of education in ethnic minority regions be enhanced and that a national common language be further promoted.

To improve the quality of teaching staff

The Plan intends to establish a modern system of high-performing instructional staff, strengthen teachers' ethics training and improve the management and development policy to enhance teaching capabilities. It places emphasis on constructing teacher education bases, supporting leading universities in developing teacher education programmes and providing public funding for normal university students. It specified the goal of promoting exemption from teacher qualification assessments for graduate students in education-related majors and students in public-funded normal universities. The Plan also lends support to leading engineering universities in developing vocational and technical teacher training programmes and establishing a collaborative training mechanism for "double tutors" with the involvement of staff from higher education institutions, vocational schools and industry. Additionally, the Plan seeks to deepen comprehensive reforms in teacher management across primary schools, secondary schools and kindergartens by coordinating teacher arrangements and inter-regional personnel exchanges. It highlights the need for teacher management reform in compulsory education, aiming for "county-level management and school-level employment", and emphasises increasing the proportion of teachers with middle and senior professional job titles.

To further reform education

The Plan aims to further reform the educational evaluation system and improve evaluation mechanisms. It emphasises developing well-rounded education and focuses on fostering students' patriotism, innovative spirit and healthy personality. It requires education to be covered in public welfare initiatives, boosting investment in education and reforming the management system for educational funds to enhance efficiency. The Plan encourages expanding decision-making powers for schools, improving their internal governance structures and guiding social participation in school governance. It highlights the need to reinforce the comprehensive reforms of examination and enrolment systems, and recommends supporting and regulating the development of private education while promoting cooperation with leading schools in other countries. Moreover, the Plan intends to leverage the advantages of online education, improve lifelong learning systems and build a learning society.

3. Plan for 2035: Goals and tasks for the modernisation of China's education

In 2019, China's Education Modernisation 2035 plan was released by the Chinese Communist Party (CPC) Central Committee and the State Council (2019). It outlines the development goals and tasks of China's education through the year 2035.

Development goals

China's Education Modernisation 2035 plan outlines the overall goal of promoting educational modernisation. By 2020, China aims to fully achieve the goals envisioned in the 13th Five-Year Plan, strengthening the overall capacity and international influence of education, noticeably increasing the average years of schooling among the working-age population and making significant progress in education modernisation. This effort contributes to China's journey toward moderate prosperity in all respects (Quanmian Xiaokang).

Building on this foundation, the education sector will further improve over the next 15 years, with the aim of achieving its overall modernisation by 2035, in order to make China a powerhouse in terms of education, human resources and talent, which will in turn provide a solid foundation for building China into a great modern socialist country that is prosperous, strong, democratic, culturally advanced, harmonious and beautiful by the mid-21st century.

The main development goals for China's education by 2035 include establishing a modern education system that supports lifelong learning for all, providing universal access to quality pre-school education, achieving quality and balanced compulsory education, fully popularising upper secondary education, promoting enhanced vocational education, improving the competitiveness of higher education, ensuring special schooling for individuals with disabilities and fostering a new model of education governance with broad societal participation.

Development tasks

China's Education Modernisation 2035 plan focuses on the most pressing issues and weaknesses in the country's educational development, while considering both immediate and long-term perspectives. It outlines ten strategic tasks aimed at advancing educational modernisation:

Following Xi Jinping thought on socialism with Chinese characteristics for a new era.

Building a world-class education sector with Chinese characteristics.

Improving the accessibility of quality education from pre-school to higher education stages.

Ensuring equal access to basic public education services.

Establishing a modern education system of lifelong learning.

Improving the training process of first-class talents and their innovation capabilities.

Building a highly professional teaching staff with innovative aspirations.

Accelerating education reform in the information era.

Creating a new landscape for opening the education sector to the world.

Promoting education modernisation in terms of management system and capacity.

4. Report to the 20th National Congress of the Communist Party of China: New goals for education in China's new era

On 16 October 2022, President Xi Jinping delivered a report at the 20th National Congress of the Communist Party of China (Xi, 2022). This important report called for invigorating the country through science and education and developing a strong workforce for the modernisation drive.

The report emphasises education, science and technology, and human resources as the foundational and strategic pillars for building a modern country in all respects. It highlights the importance of recognising science and technology as the primary productive force, talent as the primary resource and innovation as the primary driver of growth. The proposed strategies include invigorating China through science and education, workforce development and innovation-driven development. Additionally, the report advocates for new developmental areas, nurturing emerging growth drivers and fostering new strengths to sustain steady development.

The report seeks to prioritise education, enhance self-reliance, strengthen science and technology, and rely on talent for pioneering development. It emphasised accelerating the establishment of a robust education system, strengthening scientific and technological capabilities and developing a quality workforce. The report advocates ongoing efforts to train talent and comprehensive enhancements in talent development at home. All these measures were put forward to produce top-tier innovators and attract the brightest minds globally.

To develop education that meets the people's expectations

Education is of critical importance to China's future. The fundamental issues that education must address include what kind of people China should cultivate, as well as how to cultivate and for whom to cultivate them. The report stresses the central goal of fostering virtue through education, with the goal of nurturing a new generation characterised by sound moral reasoning, intellectual ability, physical vigour, aesthetic sensibility and in-demand skills. Emphasising a people-centred approach, the report calls for swiftly constructing a high-quality education system, advancing students' well-rounded development and ensuring educational equity.

To implement the workforce development strategy

Cultivating a large workforce of high-quality talent who have both integrity and professional expertise is of critical importance to China's long-term development. The report highlights the importance of respecting work, knowledge, talent and creativity. Proactive and open talent policies are encouraged to inspire dedication to the nation and its cause. The report advocates for a more strategic distribution of human resources and made concerted efforts to cultivate talented people in all fields and to create a large, well-structured and high-quality workforce.

The report proposes expedited efforts to build global hubs for talent and innovation, promote the better distribution and balanced development of talent across regions and build up China's comparative strengths amidst global competition for talent. It seeks to nurture a contingent of personnel with strategically important expertise and cultivate greater numbers of master scholars, science strategists, first-class scientists and innovation teams, young scientists, outstanding engineers, master craftsmen and highly-skilled workers.

The report also emphasises increasing international personnel exchanges and potential leveraging, as well as the reform of talent development systems to attract, nurture and utilise diverse talents. The report underscores the necessity of bringing together the best and brightest across fields for national progress.

4.1. Policies focusing on alleviating students' academic workload and regulating extracurricular education

In recent years, China has made significant efforts to alleviate the excessive study burdens on students in compulsory education, driven by the Guidelines on Further Easing the Burdens of Excessive Homework and Off-Campus Tutoring for Students Undergoing Compulsory Education issued by the government in 2021 (General Office of the CPC Central Committee and General Office of the State Council, 2021). This policy was prompted by the growing dominance of off-campus tutoring institutions, which overshadowed formal on-campus education during the compulsory education phase, placing considerable mental and financial strain on both students and their families. To shift the focus back to on-campus education, the Guidelines emphasise not only regulating off-campus tutoring, but also improving the quality of education and services provided within schools. To achieve this, the policy offers detailed recommendations for schools, including designing homework based on scientific principles, minimising the time students spend on assignments, providing after-school services to meet diverse student needs and optimising educational administration to better support students and teachers.

The policy also outlines specific standards for homework across subjects at each educational stage. For first- and second-grade elementary students, no written assignments should be given for homework, though they may do exercises in school to reinforce their learning. For third to sixth graders, written homework should not exceed 60 minutes on average, and for junior secondary school students, it should be kept under 90 minutes (Kong and Chen, 2024).

While the Guidelines set out various goals and requirements for on-campus education, particular emphasis is placed on regulating off-campus private tutoring activities. Some key points are as follow (WilmerHale et al., 2021):

Local authorities will not approve new subject-based off-campus and after-school training institutions that target compulsory education students. Existing subject-based training institutions will be required to register as "non-profit organisations". All online subject-based training institutions must obtain approval from local governments.

For non-subject-based training institutions, such as those offering sports, arts and music programmes, local governments will need to specify the relevant oversight departments, set specific standards and enforce a strict review and approval process.

Subject-based training institutions are prohibited from conducting Initial Public Offerings (IPOs) or raising funds from capital markets in any form. Quoted companies are also banned

from investing in these institutions through stock market transactions or asset acquisitions in equity or cash. The use of foreign capital is restricted in mergers, acquisitions, trustee arrangements, franchising or using Variable Interest Entity (VIE) structures to control or participate in subject-based training institutions.

A filing and supervision system will be established to control and monitor training materials and content. Excessive training and early education are prohibited. Non-subject-based institutions are prohibited from offering subject-based programmes or overseas education courses.

Off-campus training institutions are forbidden from conducting subject-based training during national holidays, weekends or winter and summer breaks. Online training should prioritise protecting students' eyesight; each session should be limited to 30 minutes, with a minimum 10-minute break between sessions, and the training should end no later than 9 pm.

Off-campus training institutions are also prohibited from enticing teachers away from public schools through improper means, and advertising for training institutions is banned on mainstream media platforms.

In cities like Beijing, Shanghai, Shenyang, Guangzhou, Chengdu, Zhengzhou, Changzhi, Weihai and Nantong, pilot programmes will be introduced to assess existing subject-based training institutions, provide in-school extracurricular (non-subject-based) programmes using school resources, invite off-campus training providers through government-led selection processes and enhance the regulation of training fees and charges.

SOUTH AFRICA

South Africa's education system has made progress in addressing poverty, youth employability, multilingualism, the rural-urban divide, teacher development and early childhood education. Pro-poor policies have reduced financial barriers to education, improving primary school enrolment rates. The government's commitment to improving youth employability is evident through increased youth participation in vocational and technical training and the inclusion of entrepreneurship education to bridge the gap between education and employment. The languages policies have raised awareness about mother tongue education, promoting literacy and cognitive development. Progress has been made with the rural-urban divide by launching initiatives to form partnerships to develop young people and increase youth employability. However, progress has been inconsistent, with the challenges in education compounding making it difficult to break the cycle of poverty. This chapter first addresses these policies followed by a discussion about the progress or lack thereof towards transformation.

Towards transformation: South African education policy landscape

The South African education policy landscape reflects a determined effort to address the inequalities entrenched by apartheid and to build a more inclusive, equitable education system. The key policies to transform education call for alleviating poverty, youth unemployment, multilingualism, the rural-urban divide, teacher development and early childhood education. Together, these policies form a framework intended to reshape South Africa's educational landscape in alignment with social and economic development goals.

Alleviating poverty

The education system is seen as a key mechanism for breaking the cycle of poverty by providing equitable access to quality education. Several pro-poor policies have been introduced to address disparities in school funding, remove financial barriers to educational access and enhance learning capacity through meal provision. The National Norms and Standards for School Funding (NNSSF) (DBE, 2020a) was developed to create a more equitable system of school funding, particularly in historically disadvantaged areas. Schools are ranked into quintiles based on their socio-economic context. Poorer schools (lower quintiles) receive additional funding per student, ensuring that these schools have adequate resources to provide quality education. Directing more resources to schools in impoverished communities alleviates the financial burden on poor families. The No-Fee Schools Policy (DBE, 2020b), introduced in 2006, builds on the SASA framework that made school more accessible to all students by alleviating

economic barriers to education for children from low-income households. The policy ensures that schools in the poorest communities (primarily Quintiles 1-3) do not pay for school fees. The National School Nutrition Programme (NSNP) (DBE, 2020a) was introduced as part of broader efforts to alleviate the impact of poverty on educational outcomes. The programme provides free meals to students in the poorest schools, ensuring that hunger does not hinder their ability to concentrate, learn and succeed in school (Department of Basic Education, 2008). The NSNP is critical in addressing food insecurity, particularly in rural and township schools where poverty levels are highest. The Accelerated Schools Infrastructure Delivery Initiative (ASIDI) (DBE, 2020b) addresses infrastructural shortages in rural and township schools to provide students with a safe and supportive learning environment. Parental participation in the decision-making processes is important to prioritise resource allocation.

Youth employment

The government has introduced several educational and vocational policies that aim to improve youth employability by aligning education and skills development with labour market demands. The White Paper for Post-School Education and Training (DHET, 2024) seeks to increase access to education and training opportunities and enhance the quality of post-school education. It outlines strategies for integrating various strands of the post-school system and fostering collaboration between educational institutions and employers. The National Skills Development Plan 2030 (NSDP) (DHET, 2024) builds on previous national skills development strategies to address skills gaps and promote employment. Through increased employer participation, it aims to create a skilled and capable workforce, particularly focusing on addressing the mismatch between the education system and labour market demands. The TVET (DHET, 2024) is an important component for addressing youth unemployment in South Africa. These institutions are designed to provide students with practical technical and soft skills that are in demand in the labour market. The Three Streams Curriculum Model (DBE, 2020a) represents a significant shift in South Africa's approach to secondary education by offering three distinct pathways: academic, technical and vocational. This model aims to provide students with more flexible options that align with their abilities and interests. The technical and vocational streams are particularly important for promoting youth employability, as they focus on practical skills development and prepare students for both formal employment and entrepreneurship. The focus of the National Skills Development Strategy (NSDS) (DHET, 2024) is on improving the effectiveness and efficiency of the skills development system across all sectors.

Multilingualism

Multilingualism in schools acknowledges and respects linguistic diversity, fostering a sense of inclusion and belonging among different cultural groups. It aims to improve learning outcomes and build social cohesion. The Language in Education Policy (1997) (Rosenthal, 2013) is one of the foundational frameworks for promoting multilingualism in South African schools. It emphasises the use of mother-tongue instruction in the early years of education, while gradually introducing a second language with one being the language of instruction. The Use of Official Languages Act (2012) (RSA, 2019) mandating the use of at least three official languages in government communications elevates Indigenous languages in this regard. Mother Tongue-Based Bilingual Education (MTbBE) (Zenex, 2024) sets out a model that advocates the use of mother tongue in schools to improve academic performance, particularly in rural schools. The Inclusion of Indigenous Knowledge Systems (IKS) (DST, 2023) into the formal education system helps preserve cultural heritage and provides a more relevant and contextualised learning experience for students from diverse backgrounds. These policies collectively demonstrate South Africa's efforts to promote multilingualism, preserve Indigenous languages and address historical inequalities in the education system.

Rural-urban continuum

The rural-urban continuum in South African education persists as a key challenge, particularly in relation to human resources, parent absenteeism, limited infrastructure, as well as contextual and cultural relevance in the curriculum. The National Framework for Rural Education (NFRE) (DALRRD, 2020) aims to enhance access, equity and quality in rural schools. This is done by addressing the infrastructure gap between rural and urban schools, curriculum relevance in rural contexts, building teacher capacity and incorporating community participation in rural education. The Comprehensive Rural Development Programme (CRDP) (DALRRD, 2020) extends beyond schools to the development of rural areas. The National Rural Development Strategy (DALRRD, 2020) recognises the need for an education system that is aligned with the rural economy and cultural context. The strategy encourages the development of curricula that focus on rural economic activities, such as agriculture and small-scale entrepreneurship, while also promoting cultural education that reflects the rural context.

Teacher professional development

Teacher training and professional development are critical components in improving the quality of education in South Africa. Effective teacher education and continuous professional development ensure that teachers are well-equipped with the necessary skills and knowledge to deliver quality instruction, especially in a diverse and evolving educational landscape. The National Policy Framework for Teacher Education and Development (2006) (DHET, 2006) proposes an overall strategy for the successful recruitment, retention and professional development of teachers. The framework outlines the roles of different institutions and professional bodies in preparing teachers and supporting their continued development. The Integrated Strategic Planning Framework for Teacher Education and Development (ISPFTED) (DHET, 2006) in South Africa is a comprehensive plan that aims to improve the quality of teaching and learning through teacher training and professional development. It ensures a coordinated effort to address systemic issues in teacher education and development in South Africa, with the ultimate goal of improving educational outcomes. Continuing Professional Teacher Development (CPTD) (DHET, 2006) is a crucial component of improving teacher quality in South Africa. The CPTD system seeks to provide ongoing learning and development opportunities for teachers throughout their careers. The CPTD system is designed to ensure that teachers regularly update their skills and knowledge in line with new educational trends, policies and pedagogical approaches. The Funza Lushaka Bursary Programme (DBE, 2020b) was introduced by the Department of Basic Education to address South Africa's teacher shortage, especially in critical subject areas and disadvantaged regions. The programme funds initial teacher education for eligible students, covering tuition, accommodation and living expenses. In return, recipients are required to teach in public schools for the same number of years they received funding.

Early childhood education

Early childhood education (ECE) is a critical intervention point in the fight against educational inequality and the effort to improve school readiness in South Africa. The country's education system continues to be marked by historical inequalities that particularly affect children from disadvantaged communities. ECE policies in South Africa seek to mitigate these disparities by providing young children with access to quality early learning experiences. The ECE Policy (DBE, 2020b) provides a framework for the delivery of ECE services to ensure equitable access and quality for children from birth to five years of age. The policy recognises the importance of ECE in cognitive, emotional and social development, with the goal of levelling the playing field for children from different socio-economic backgrounds. The ECE Policy aims to prepare children for primary education by providing them with the foundational skills in literacy, numeracy and social development. The National Integrated Early Childhood Development Policy (2015) (DBE, 2020b) seeks to provide a comprehensive approach to ECE by integrating services such as education, health, nutrition and psychosocial support. This policy highlights the need for inter-sectoral collaboration to ensure holistic development for children. The National Integrated ECE Policy (DBE, 2020b) recognises that health and nutrition are integral to school readiness and significantly affect children's cognitive development and ability to engage in learning. These early advantages often persist into primary school and beyond, contributing to continued educational equality. The Policy on Screening, Identification, Assessment and Support (SIAS) (DBE, 2020b) aims to identify and support children with learning barriers or disabilities at an early stage to ensure they receive the necessary interventions before entering formal schooling. This way, these children can enter primary school with the necessary support structures in place, which affects their ability to succeed academically. The Migration of ECE from the Department of Social Development to the Department of Basic Education (DBE, 2020b) represents an important policy shift aimed at aligning early childhood education with the formal schooling system. The goal of the migration is to improve school readiness by better aligning ECE with primary education. The Early Grade Reading and Mathematics intervention (Spaull & Taylor, 2022) is focused on improving early-grade reading and mathematics, thereby setting the foundational skills in children required for future academic success.

Enablers and constraints to progress in education transformation in South Africa

Cumulative effect of challenges

The **postcolonial legacy of unequal development and resourcing** continues to affect education reform, leading to persistent disparities in access to quality education. Despite progress since 1994, the system still reflects stark inequalities, particularly between schools serving different racial and socio-economic groups, rooted in the enforced separation and unequal distribution of resources during apartheid (Gumede & Biyase, 2016). A key challenge in policy implementation is the unequal allocation of resources and infrastructure, especially between urban and rural areas (Mlachila & Moeletsi, 2019). Rural schools, which primarily serve lower-income Black communities, are often under-resourced compared to urban schools, exacerbating the educational divide. Socio-economic inequalities further deepen these disparities, limiting students' access to quality education (Mlachila & Moeletsi, 2019). Addressing these disparities not only requires funding, but also strategic, context-sensitive policies to dismantle barriers in marginalised communities. Targeted interventions beyond policy design are essential to ensure reforms benefit disadvantaged areas, thus supporting the goals of equity and inclusion in South African education.

Concomitant **systemic resource constraints** pose ongoing challenges in implementing education reforms. Systemic shortages in infrastructure and funding undermine the sustainability of these reforms. Approximately 2,800 schools still lack adequate sanitation and ICT facilities, while access to assistive devices and connectivity remains unmet (DBE, 2024b). Additionally, the shortage of ECE teachers and specialist teachers is compounded by teacher attrition, an ageing workforce and a decrease in graduates entering the labour market (DBE, 2024b). While the budget allocation to education has increased to 7%, this falls short of requirements, impacting areas such as health and welfare services, teacher bursaries and infrastructure improvements (DBE, 2024b). Addressing these resource constraints requires innovative strategies, such as public-private partnerships, community engagement and efficient resource allocation.

Poverty remains a pervasive challenge that compounds educational disparities across generations. Policies such as the No-Fee Schools Policy and the NSNP aim to support low-income students, but the impact is diluted by ongoing infrastructure deficiencies, particularly in rural and township schools.

Despite initiatives like the TVET programmes, which aim to align education with labour market needs, **youth unemployment** remains critically high. Currently, 32.4% of young people aged 15-24 are "Not in Education, Employment or Training" (NEET). Findings show that youth unemployment is compounded by financial barriers, a lack of mentorship, uncoordinated partnership, a lack of career guidance and limited economic capacity (Xulu-Gama & Hadebe, 2022; Zibengwa & Tanga, 2023; Zinn et al., 2019), all of which impact young people's aspirations (Omidire et al., 2023). The cumulative effect of these employment challenges reinforces poverty cycles, as young people struggle to transition from school to stable employment.

Although **multilingual education** policies like the Language in Education Policy (1997) and MTbBE promote mother-tongue instruction in early grades, the lack of resources and teacher proficiency in Indigenous languages prevent their effective implementation (UNESCO, 2024). In many rural and township schools, where students would benefit most from mother-tongue instruction, shortages of teaching materials, large classes and teacher competence restrict access to multilingual education (Du Plessis & Mestry, 2019). Transitioning to English as the primary language of instruction from grade 4 often disrupts comprehension and engagement, particularly for students without sufficient language support (Heugh, 2000).

The **rural-urban** divide in South Africa's education system represents a significant, cumulative challenge that policy efforts have yet to resolve effectively. Schools in rural areas often face stark disparities compared with their urban counterparts, with chronic shortages in basic infrastructure, limited access to qualified teachers, inadequate learning resources and high student-teacher ratios (Wet & Osman, 2018).

Teacher quality is critical for educational outcomes, yet professional development policies have not been adequately implemented. The ISPFTED aims to enhance teacher quality through ongoing training. However, rural and under-resourced schools still face a lack of professional development opportunities that are limited by inconsistent funding (Motsoeneng, 2022). High

teacher turnover rates and inadequate pre-service training continue to affect instructional quality, as teachers in these regions often struggle to meet diverse learning needs without sufficient support (Fleisch & Motilal, 2020). The CPTD system has expanded opportunities for teacher professional development, with a particular focus on upskilling teachers in key subjects, however, its implementation has fallen short due to work commitments, a lack of accountability and resistance to change within the education system (Mlachila & Moeletsi, 2019).

The National Integrated **Early Childhood Development** Policy (2015) highlights the need for quality early learning to address foundational educational disparities, yet implementation has been inconsistent. Even though 882,128 children were benefiting from ECD subsidies as of September 2023, there is still an access gap of 551,966 children, with only one in three children able to access the state-subsidised ECD programme (DBE, 2024). These disparities in early childhood development create cumulative disadvantages, as children who miss out on foundational learning opportunities struggle to keep pace academically, reinforcing educational and economic inequality over time.

The **SASA** was enacted to promote equitable access to basic education, ensure effective school governance and provide a regulatory framework for school funding and administration. Governance and management are crucial for successful education reform, however, systemic challenges obstruct policy implementation. Issues such as administrative inefficiency, inconsistent policy interpretation, limited accountability and fragmented leadership undermine improvements, particularly in disadvantaged communities. Although 90% of schools had functioning SGBs, many lack the capacity for impactful decision-making with SGBs in rural areas struggling with low parental involvement and limited training (UNESCO, 2021). This leads to inconsistent implementation and gaps in service delivery and educational outcomes (Wiseman & Davidson, 2021).

The **National Education Policy Act** (NEPA) has provided a comprehensive policy framework for managing education in South Africa, yet challenges in consistent implementation and monitoring hinder its effectiveness (Mlachila & Moeletsi, 2019). This calls for greater transparency and community involvement in educational governance (Mosweu, 2022). Ineffective implementation and mismanagement, compounded by reports of corruption, continue to erode public trust in educational governance (Wiseman & Davidson, 2021), significantly affecting good governance (CDE, 2023).

In conclusion, while South Africa's education policies address crucial areas such as poverty, literacy and youth employment, cumulative and systemic challenges continue to hinder transformative progress. The persistence of infrastructure gaps, resource shortages and limited access to qualified educators in rural and disadvantaged communities entrenches educational inequality across generations. Although programmes like TVET and multilingual education aim to empower students and bridge divides, their impact is limited. Without systemic and consistent implementation across these areas, meaningful reforms aimed at educational transformation remain unrealised.

Policies as enablers of progress

South Africa's education system faces challenges rooted in socio-economic disparities, limited resources and historical inequities. In response, a series of targeted policies have been developed to address these challenges with the aim of improving access to quality education, enhancing teacher development and supporting youth employability. Key pro-poor policies have been implemented to reduce financial barriers, increase educational participation and alleviate poverty-related challenges. Additionally, policies focusing on vocational education, multilingualism and bridging the rural-urban divide seek to create a more inclusive and equitable educational landscape. This section reviews these policies, highlighting their roles as enablers of educational progress and examining their impacts on specific areas, including infrastructure development, teacher training and early childhood education.

The pro-poor policies act as a critical enabler in helping to alleviate immediate socio-economic constraints by reducing financial barriers to education. By eliminating school fees in the poorest schools, the **No-Fee Schools Policy** has significantly improved primary school enrolment rates, which have consistently remained above 95% (STATSSA, 2023). Furthermore, the NSNP has had a positive impact by providing free meals to over nine million students daily, which not only addresses hunger but also contributes to increased attendance and learning outcomes. While the infrastructure gap remains, the **ASIDI** has made significant progress in improving infrastructure, equipping schools with age-appropriate and safe sanitation facilities, providing water and electricity, repairing structures and building additional classrooms (DBE, 2024b).

The government's commitment to improving youth employability is evident through the development of the TVET sector and policies like the NSDS. These policies enabled progress through increasing youth participation in vocational and technical training. They have also fostered some public-private partnerships, thereby providing workplace learning opportunities that better prepare students for the job market (Bank, 2023). The **Three Streams Curriculum Model** has incorporated entrepreneurship education, which promotes an alternative pathway to employment. Meanwhile, TVET colleges have begun to establish entrepreneurship hubs to foster innovation and self-employment. By increasing access to vocational training and providing entrepreneurship education, these policies are helping bridge the gap between education and employment, creating clearer pathways to economic participation for young South Africans.

Efforts to address linguistic diversity and social cohesion through the South African Language in Education Policy (LiEP) and MTbBE policies have raised awareness around mother-tongue education and laid the groundwork for subsequent language policies (Probyn, 2009). **Mother-tongue instruction** is common in grades R–3 and **MTbBE** initiatives seek to extend it to grade 7 by 2025. The policy's emphasis on students starting their education in their home language leads to improvements in literacy and cognitive development during the foundational years (Brock-Utne & Skattum, 2009). These policies illustrate the potential for inclusive language policies to improve academic achievement and support cultural preservation.

The **rural-urban continuum** in South Africa reflects the historical inequalities entrenched by apartheid, where rural areas, particularly those designated as homelands, were deliberately underdeveloped. Work-life and family-life is navigated on a continuum between employment in urban spaces combined with a sense of belonging and identity in a rural space of origin. Some progress has been made in the preparedness of teachers who teach in rural spaces. The NFRE policy to strengthen teacher capacity through incentives and training programmes is designed to equip teachers for the unique challenges of rural teaching (Du Plessis & Mestry, 2019). The CRDP aims to tackle underdevelopment, poverty and unemployment through intergovernmental and community-based efforts. Intergovernmental and community-based projects have proven to be effective in some Western Cape wards (Roman & Ruiters, 2020).

Teacher training and professional development are critical components in improving the quality of education in South Africa. The ISPFTED was launched in 2011 as a 15-year plan to improve teacher education and development. It aimed to address such issues as strengthening existing teacher education institutions, optimising their capacity and establishing new institutions where needed. The CPTD was introduced as part of these reforms to help teachers identify and address their own professional development needs. In addition, universities have received funding for teacher education programmes, while more university and training institutions now offer teacher training in Foundation Phase education. The South African Council for Educators (SACE) Annual Report 2023/2024 indicates that professional new teacher registration stood at 45,931, and 2,675 ECE practitioners were included in the professionalising programme. The **CPTD System**, amended in 2018, has contributed to improved instructional quality (Kibirige & Maponya, 2020) with more teachers participating in professional development activities (SACE, 2024).

The ISPFTED and CPTD systems have made progress in supporting teacher quality and professional growth. The CPTD system encourages teachers to participate in regular training and professional development, with teachers now required to earn points through accredited learning activities (SACE, 2024). This system has helped improve instructional quality by ensuring that teachers stay up to date on best practices and pedagogical advancements (Kibirige & Maponya, 2020). In addition, universities have received funding for teacher education programmes and more university and training institutions now offer teacher training in Foundation Phase education. Targeted initiatives, such as the Funza Lushaka Bursary Programme, have provided financial support for prospective teachers, helping to address teacher shortages (DBE, 2024a).

The overall aim of **Early Childhood Development** policies in South Africa is to mitigate socio-economic disparities in preparing children for school and lifelong learning. These policies have increased awareness of the critical role that early childhood development plays and the importance of the early identification and support of children with special needs. With nearly 90% of children under the age of six in South Africa relying on the public health system, the policies have improved access to child and maternal health services and increased immunisation (Hall K, 2024). In urban areas, there has been an increase in the number of ECE centres with qualified practitioners and structured learning programmes (Matjokana, 2024). Furthermore, teacher training that targets reading and numeracy programmes have shown positive impacts on early grade achievement in urban and well-resourced schools (Spaull & Taylor). In terms of the early identification of special needs in children, the SIAS policy has made progress in standardising and improving support for learners, however, its full potential in enhancing early childhood development is yet to be realised. The recent migration of ECD oversight to the DBE aims to improve the coordination of services, monitoring and support for ECD centres (DBE, 2024a).

In summary, South Africa's education policies have played a critical role in addressing various socio-economic challenges that impact educational access, quality and equity. Pro-poor initiatives, such as the No-Fee Schools Policy and the NSNP, have helped to alleviate immediate financial and nutritional barriers, supporting higher enrolment and improved learning conditions. Vocational and technical education initiatives, along with policies promoting multilingualism and rural education development, have aimed to bridge divides and support diverse learner needs. Furthermore, investments in teacher training and early childhood development have laid the groundwork for sustained improvement in educational quality. Despite these strides, significant obstacles remain, particularly in under-resourced areas where implementation challenges persist. A continued commitment to targeted interventions, effective resource allocation and comprehensive policy monitoring will be essential for creating a truly equitable and transformative education system in South Africa.

South Africa's education system faces deep-rooted challenges that stem from a postcolonial legacy of policies that institutionalised inequality, which continues to shape disparities in resource allocation, access to quality education and policy implementation. While substantial reforms have been made to promote equitable access, especially with the onset of democracy in 1994, significant gaps persist, particularly between urban and rural schools, and among racial and socio-economic groups. Systemic challenges continue to hinder the realisation of equitable and effective education reform in South Africa. The enduring effects of apartheid-era inequalities, compounded by resource shortages, insufficient teacher preparation and governance issues, underscore the need for targeted, sustained efforts. Although policies such as the SASA and NEPA provide foundational frameworks, their impact is limited without effective implementation, accountability and community engagement. Moving forward, addressing these systemic barriers through innovative partnerships and strategic resource allocation is essential for fostering an inclusive, high-quality education system that serves all South Africans.

In conclusion, although significant progress has been made in addressing certain educational challenges in South Africa, many obstacles persist. The government is committed to policies that aim to improve quality and equity, but the effectiveness of these policies varies widely, especially in rural and under-resourced areas. Key challenges include persistent inequalities in access to quality education, insufficient resources and a disconnect between education outcomes and economic demands. Strengthening governance, ensuring equitable resource allocation and improving teacher quality are essential steps towards bridging these gaps. Moving forward, a more targeted approach that addresses the specific needs of marginalised groups, especially in rural areas, is crucial for the continued development of an inclusive, education system in South Africa. By enhancing policy implementation and ensuring accountability, the country can build a more equitable and effective education system that not only meets national needs, but also prepares students for the global economy.

CONCLUSION: LESSONS LEARNED FOR THE REST OF THE WORLD

Providing access to quality education for all children, regardless of residence, race, ethnicity or family income, is a challenge that unites BRICS countries. This challenge is not specific to the BRICS context. However, it is manifested specifically under different weights (hierarchies) and a confluence of factors that affect educational accessibility and the equality of educational opportunities in BRICS countries. As a result, the responses to this challenge have notably different features shaped by the economic, cultural and political conditions of individual countries.

Demographic trends have been a global factor in shaping educational policy in recent years and will continue to do so for the foreseeable future. We can see that BRICS countries differ qualitatively in this regard at present: predominantly young populations in South Africa, India and Brazil, on the one hand, and Russia and China, on the other, where the share of young people is already relatively small and will continue to decrease. However, in the future, except perhaps for South Africa, these countries may face a population decline. All countries in the 21st century have implemented policies to create new schools and increase teacher training, but the current decline in birth rates raises the issue of school mergers or network optimisation in China, which will soon be relevant for Russia and then India. In terms of BRICS cooperation, there are opportunities to study the experience of adapting school education systems to changing demographic conditions in order to prepare for transformations in the population structure. As noted in the chapter on India, this will shift the focus from quantity to quality in education. Given the current depopulation trends, the value of each individual and the importance of sufficient investment in developing human capital from an early age to cultivate the modern skills that future workers need to be highly productive will only grow.

Russia is already facing a labour shortage, which is being addressed by attracting migrants primarily from Central Asian countries. For Russia, more so than others, structuring a policy for the children of labour migrants in education has become a very acute issue in the current situation. China, in turn, faces the task of ensuring equal access to basic public educational services for children from families of internal migrants from rural areas.

BRICS countries vary in terms of the level and dynamics of urbanisation, but in all of them, the rural factor significantly influences the quality of life and opportunities for the population, including in education. However, the way it manifests itself is affected by the features of the territory of residence, language, development of the agricultural sector and forms of employment for the rural population.

In all countries, there is a noticeable gap between opportunities for access to educational resources and quality education for children in the city and in the countryside. This is due to both infrastructure and personnel shortages, and in some countries, to some parts of the rural population that use children in agriculture, leading to missed classes and dropouts. In countries like India and South Africa, which experience pronounced rural poverty, there has been a trend of less educational coverage for rural children from the primary level to subsequent levels and a higher dropout rate. In these countries, the rural-urban continuum clearly defines differences between territories in terms of the level of development of school infrastructure and, of course, academic performance. Russia and subsequently China have achieved alignment in the coverage of urban and rural areas, and they are now seeking to reduce the gap in educational outcomes influenced by noticeable disparities in household investments in urban versus rural settings. For certain Russian territories with high levels of depopulation, the task of ensuring standards of infrastructure and staffing in small-sized schools remains relevant.

In turn, the sharp rise in urbanisation in Brazil has created a risk for the social adaptation and employment of young people in large cities, prompting the need for large-scale socialisation and vocational training programmes. In China, the current rate of population influx into cities poses the challenge of ensuring accessibility to quality education for the children of "new urbanites". BRICS countries differ in terms of the economic opportunities available in their regions (states) due to local development, manufacturing and income levels, and consequently, the tax base and budget resources. This has resulted in notable differences in per-student spending and teacher salaries, capital repair capabilities and the regions' ability to procure modern equipment, as well as significant variations in family expenditures on core and supplementary education.

For all countries, the challenge lies in the varying opportunities for accessing quality education: in Brazil, the northern regions have poorer access compared with the southeastern regions, in China, there is a noticeable imbalance in the distribution of educational resources among the eastern, central and western regions, and in Russia, the North Caucasus and Far East regions clearly have a lower level of infrastructure development and education quality. In South Africa, there are stark disparities between regions with varying levels of urbanisation. The issue of intra-country interregional educational inequality is a focus of interest for researchers within these countries and may become a critical subject of scientific cooperation within BRICS.

All countries strive to address the task of equalising educational opportunities for children across different regions. Tools for the national level to support regional and local levels through transfers or targeted funding, such as grants in South Africa and programmes in Brazil, are essential to ensuring a successful response to these challenges. Additionally, development programmes for infrastructure, transportation in rural areas, internet connectivity and teacher recruitment, particularly the National Rural Development Programme to improve infrastructure, education quality and teacher training in rural schools in South Africa, play a crucial role. A clear example of the effectiveness of such measures is the significant reduction in the gap in access to quality education for children in rural and urban China over recent decades. Interregional disparities manifest themselves more prominently in countries with greater decentralisation of governance and the distribution of power between the federal and regional levels (Brazil, India and South Africa) and are more successfully addressed in China with its higher level of centralisation. In Brazil, efforts are directed towards strengthening cooperation among federative units in implementing the national plan. In recent years, Russia has successfully implemented measures to strengthen the vertical management of school education to ensure a unified educational space.

BRICS countries have a wide range of geographical diversity, which creates challenges for educational opportunities. These challenges range from the vast distances of Russia's Far East and Siberia and the inaccessible mountains of India to the forests in Brazil, leading to hard-to-reach isolated settlements. Building schools becomes a costly endeavour for these countries, considering their economic capabilities – whether it's lightweight constructions for dozens of students or schools with the most modern infrastructure for thousands of children.

Several BRICS regions also have extreme climate conditions: severe frosts in some areas of Russia, the scorching sun in India, tropical cyclones in China and floods in Brazil, South Africa and Russia all cause school closures, while air pollution and prolonged polar nights create risks for the physical and psychological well-being of students and teachers (UNICEF, 2025). Social-economic inequality and manifestations of poverty are typical for all BRICS countries. However, their indicators vary greatly and affect education differently. In Brazil and South Africa, significant economic inequality means that access to general education heavily depends on the family's socio-economic status, which determines the duration of education and future opportunities. Meanwhile, in Russia and China, poverty does not act as a barrier to full secondary education and basic educational resources, although children from low-income families have fewer opportunities to achieve quality educational results and attend universities.

Children from poor families in countries like Brazil and South Africa face basic issues such as nutrition and transport accessibility to schools. Hence, free meal programmes and school transportation play a central role in education development plans in these countries. Russia and China, having resolved these issues on a national scale at earlier stages, still face educational poverty manifestations: some schools still lack basic facilities like warm toilets and sewage systems. Linguistic diversity is perhaps one of the most notable features that unites BRICS countries. There are specific relationships between official state languages and national languages in these countries, and this impacts education. In South Africa, English often dominates at educational institutions, which is a disadvantage for non-English speakers and affects educational access and outcomes. Ensuring education in native languages is a task that all BRICS countries are addressing, but with varying approaches and success. This matter is vital for accessibility, literacy levels and preserving national culture. Language policy remains one of the most complex areas of educational policy, where universal solutions show limitations. In all BRICS countries, education is available in multiple languages. Brazil guarantees Indigenous peoples' rights to education in their native languages. South Africa is implementing extensive programmes to teach Indigenous peoples' students in their native languages in early grades, which have received high praise (Bryant & Thomas, 2024). India also supports native language education, while China promotes the use of the national language, while preserving cultural heritage and local dialects. It is crucial that in South Africa, Russia, China and India, support is provided at the national level to create textbooks with historical and cultural context examples from states (regions). However, even when implementing consistent multilingual policies to eliminate historical inequality, there is a shortage of textbooks, workbooks and teachers ready to teach in national languages, considering family and community narratives. The experience of these policies and practices in polylingual education could clearly become subjects of meaningful discussions among BRICS experts and educators.

A modern and increasingly supported trend in educational policy is the inclusion of national components in core and supplementary education programmes. This policy is notably visible in India, which has advocated for the concept of culture-rooted education, and in China, which systematically supports policies to create a civic identity through the study of history and culture, including ancient history. Brazil has policies that include specific topics related to the history, culture, knowledge and artistic and religious expressions of the Afro-Brazilian community, Indigenous peoples and rural workers, as well as their contributions to Brazilian society. Over the past decade, Russia has increasingly emphasised the importance of educating students based on traditional values and fostering patriotism, particularly by expanding historical knowledge in the school curriculum, introducing a course on "Culture and Traditions of the Peoples of Russia," and supporting extracurricular and non-school educational projects.

Gender differences remain a strong factor in educational inequality. Girls have historically been less covered by education due to early marriages, religious and cultural norms, and greater involvement in household chores. In BRICS countries, these factors influence the accessibility and quality of education to varying degrees. Russia overcame gender inequality in the past century, and China successfully addressed it in the early 21st century. Brazil shows high rates of girls' participation in secondary education (Yi, Wang, & Feng, 2024). However, in countries like South Africa and India, cultural and religious characteristics may limit girls' school education opportunities, especially in rural areas. Countries are addressing this by establishing special schools for girls from displaced territories (India). Using India as an example, we see that ensuring gender accessibility is not simple: dropout rates for girls and boys change with different vectors depending on the education stage.

Religious traditions hold fundamental significance in India and require the preservation and development of the religious school segment. In Russia, four main traditional denominations, each with varying degrees of activity, establish their own schools and extracurricular organisations, combining state education standards with religious practices or focusing solely on the latter. In Brazil, Catholic education has long been a part of the educational system, although there is a sharp debate regarding the inclusion and representation of smaller religious communities. In China, the characteristics and specifics of denominations do not have a noticeable impact on school education.

The previous history of several BRICS countries, such as the legacy of colonialism or apartheid, significantly influences the educational situation. The majority of the population in these countries are often Indigenous and not represented in school practices. Indigenous governance models may not be followed, Indigenous culture and identity may not be prominent in curriculum examples and Indigenous languages may not be foregrounded in instructional practices. Teachers may not be trained to know how to include this rich marginalised capital into pedagogy and practice.

The consequences of colonial policies continue to impact accessibility to educational opportunities, which is particularly noticeable in South Africa and India. These countries seek to overcome the adverse effects of former educational models by implementing policies to support previously excluded groups of children and integrate national languages and culture into education.

All BRICS countries prioritise policies related to teaching staff. The challenges faced by these countries in this regard have similarities and differences. A significant issue for all of them is the shortage and turnover of teachers, especially in rural and remote areas, the uneven qualification levels of staff across regions and language training for work in multilingual environments. Russia and Brazil focus on the attractiveness of working conditions, including

salaries, in the federal context with noticeable regional distinctions. South African rural teachers face barriers to the transport and financial accessibility of professional development programmes. Teacher absenteeism is encountered in some rural areas of India.

BRICS countries employ similar measures to attract teachers to rural and remote areas, such as financial incentives and housing provision in exchange for teaching commitments, exemplified by the "Rural Teacher" programme in Russia and the Funza Lushaka Bursary Programme in South Africa. Brazil has launched a scholarship incentive programme for undergraduate students that aims to support their education and retain graduates in public schools. Various measures are also being implemented across BRICS countries to enhance teacher qualifications. Although perceptions of the desired level of proficiency vary, resources and effective organisational solutions are required in all cases. For instance, Russia and India are actively adopting mentoring practices, while Brazil and Russia focus on establishing adequate assessments of teaching staff. Reforms in teacher training and qualification assessment systems are underway in China and Russia. China aims to increase the proportion of teachers with a master's degree or higher, while South Africa supports universities that offer teacher training.

China's example shows how the stability of the political system ensures continuity in educational plans over decades, enabling progress in addressing complex issues and moving towards more ambitious goals. Meanwhile, political polarisation in Brazil creates obstacles to consistent actions and can even lead to regression. On the other hand, multiparty systems and civil society group dialogues are valuable for avoiding education ideologisation risks. The importance of a strategic approach to education development is evident in India's NEP 2020. The organisation of CONAE in Brazil to discuss educational issues and craft solutions, including the next ten-year National Education Plan, exemplifies participative policies. In Russia, the development of a new education strategy until 2040 differs from previous ones by striving for broad public engagement and discussions.

For Brazil, an essential aspect of educational policy development is its intersectoral nature. South Africa acknowledges the importance of improving management, as administrative inefficiency, inconsistent policy interpretation, limited accountability and corruption undermine progress, especially in disadvantaged communities. Additionally, South Africa supports the decentralisation of decision making by including parents and community members in school management and forming partnerships with local stakeholders, parents and students to sustain development, following the concept of Relationship-Resourced Resilience.

BRICS countries differ in terms of the economic potential of states and the well-being of their populations. This directly affects the level of free education guarantees: Russia is the only one that has extended such guarantees to all levels of general education for quite some time, while in other countries, households bear expenses at certain stages, and the state seeks ways to support low-income groups. In China, free higher secondary education is provided for economically disadvantaged students whom are identified through the household registration system. In India, we can see examples of positive discrimination by providing places in private schools to children from low socio-economic backgrounds. In South Africa and Brazil, support for poor children in accessing education is provided through differentiated tuition fees, scholarships and targeted investments. South Africa, in particular, has significantly improved primary school enrolment rates. In Russia and China, differences in school opportunities may not play a significant role, but family capabilities influence the use of resources and tutoring for extracurricular education.

All BRICS countries prioritise education as regards budget spending. Brazil, India and South Africa outline the increase of budget allocations as a percentage of GDP in forward-looking plans. Wealth differences are manifested in the sense that achieving even a relatively higher level of funding (% of GDP) in some countries unfortunately proves insufficient for addressing a lack of universal access to education or systemic infrastructure, while maintaining a relatively low level of spending allows for public access and consistent infrastructure improvement, but limits the potential development of education quality. India stands out for its efforts and mechanisms in establishing public-private partnerships to attract educational funds, as well as a special tax (Education cess), which is used for school construction, teacher salaries and providing loans to low-income students. Conversely, China has recently implemented stricter regulations on private business (especially with foreign participation) in education (schools, tutoring and extracurricular education).

Economic and educational opportunities for families differ between and within countries, which directly impacts children's education opportunities and pathways. Within the BRICS spectrum, we can see contrasting situations. Many poor families in South Africa work extended hours, often in unstable jobs, limiting their ability to participate in their children's education, and lack access to quality education, hindering assistance with homework. In India, a high proportion of adults without secondary education negatively affects their children's initial learning opportunities. Conversely, in China and Russia, there are highly educated, affluent and ambitious groups of parents who invest time and substantial resources in their children's education and additional training for admission to top universities domestically and abroad, and such hyper-focus is starting to raise concerns among the government and experts.

BRICS countries, like most countries worldwide, exhibit stratification of schools by educational resources (infrastructure, diversity of programmes, teacher qualifications and additional educational opportunities), and consequently, the accessibility and quality of education available in them. The public school segment dominates in all these countries, with the private sector playing a more significant role in Brazil and India. Private schools and some public schools have selection barriers in place. Differentiation into tracks with varying prospects for continuing education exists within the education systems of South Africa and Brazil. We observe how differences in school types or tracks available for different student groups are linked to historical periods (e.g., forced segregation and uneven resource distribution during apartheid in South Africa and differentiation in school status in Russia from 1992 to 2012). However, these factors continue to influence the reproduction and enhancement of inequality.

The depth and nature of these differences vary. The most pronounced differences are between private and public schools in South Africa, Brazil and India, where access opportunities are dictated by family wealth. In Russia and China, there are also distinctions within the public school sector, where the size and status of schools can significantly influence the benefits for their student bodies regarding university admission. This is often connected to the important talent cultivation policy in both countries, but may also reflect the privileges of elite population groups.

In some countries, the structure and types of schools are designed to cater to specific differences among groups of children. For example, there are schools for tribal children in India, nomadic schools in Russia and special schools for quilombola communities in Brazil. Despite India and China being similar in population size, China, which is significantly larger in area, also has many more schools than India. This is due to historical and geographical factors and specific policies regarding the organisation of the school network, such as supporting

the opening of primary schools even in small settlements and consolidating schools in China.

The problem of foregrounding the employability of a young work force is especially evident in India, Brazil and South Africa, where jobs are limited and unemployment excessive. For these countries, transitioning from school to employment poses a significant challenge due to the lack of vocational training, albeit for different reasons. Alongside reducing barriers to accessing vocational education, all BRICS countries are discussing and implementing measures to support vocational guidance, career counseling and expanding vocational training opportunities in schools. The social situation and labour market conditions reflect each country's strategic approach. In some cases (South Africa and Brazil), vocational training is seen as a means for young people to overcome poverty, whereas in others (Russia and China), involving graduates in secondary vocational education is a means of overcoming skilled labour shortages. The specific skills that are most important in each system also vary based on local labour market demand. As such, countries consider labour market characteristics when offering forms and models of vocational training: South Africa, for instance, focuses on developing entrepreneurial skills, since the formal labour market cannot accommodate the growing number of job seekers.

In the 21st century, all BRICS countries are guided by international documents and are implementing inclusive education policies for children with disabilities. In recent years, most countries have seen a noticeable shift in the balance between children attending special schools and those in inclusive schools. Opportunities for children with disabilities to learn alongside typical children have expanded. India, China and Russia consistently support the ability of families to choose the form of education, are strengthening the accessible environment in regular schools and developing infrastructure for special schools by creating resource centres and organising teacher training on working with special categories of children. Significant progress has been observed in Brazil, where ensuring education and qualifications for people with disabilities is among the key issues on the social agenda. However, such issues as full inclusion and quality correctional and rehabilitation assistance remain pressing for all countries. This area is one of the most promising for international cooperation.

All BRICS countries strive to ensure the highest possible standards of educational quality for the younger generation. Countries like China and Russia have special ambitions and a drive to ensure international competitiveness by aiming to be among the leaders in educational quality globally and to create world-class education systems. These countries pay particular attention to linking school education with the development of the economy, science and technology, including incorporating components related to modern technologies, such as technological literacy and AI, into the curriculum. For Russia and China, improving the system for identifying and supporting talent is also significant in this context. The advancement of these areas is largely associated with the digitisation of education. Nonetheless, there are warranted concerns about the risk of digitisation and the introduction of AI in schools in terms of increasing inequality. This concern is noted in Brazil.

As mentioned in the introduction, BRICS countries face and will continue to experience the impact of climate change on school operations and student well-being. Policymakers in these countries are seeking ways to make education respond to the challenges of climate change. In India, the curriculum includes environmental education as a mandatory component. Brazil promotes environmental education to strengthen preparedness and to prevent natural disasters. This topic is significant for interdisciplinary discussions within BRICS countries and is promising for future cross-country studies.

In South Africa, there is a greater focus on combatting historically and economically conditioned forms of structural inequality. However, there is also intent to improve education content and quality, including through developing skills and competencies for a changing world. Brazil focuses on ensuring fair and inclusive education in a multi-ethnic and socio-economically diverse society. India combines systemic measures to increase coverage and prevent dropouts among vulnerable child populations by developing skills in students that are important for effective employment in the interests of both citizens and the country and enhancing the cultural rootedness of education.

In response to complex challenges for access to primary education, BRICS countries are increasingly focusing on extracurricular activities and extended education. Transformations and the regulation of these sectors are covered in strategic documents in Russia and China. Russia is expanding opportunities for free access to modern supplementary education programmes, mainly in the STEM fields. China aims to introduce standards in this sector and enhance monitoring of education quality. Conversely, Brazil is implementing measures to provide access to all-day schools. The emphasis varies: in some cases, extracurricular activities are seen as a resource for developing modern skills and career guidance, while in others, they are viewed as a resource for caregiving and preventing deviant behaviour.

China and Russia's education development strategies also share a focus on providing holistic education, fostering well-rounded personal development and ensuring a balance of intellectual, physical and moral growth in the younger generation. Consequently, both countries are seeking new approaches to assessing educational outcomes that allow them to overcome the narrow focus on education oriented towards high-stakes exams and are facilitating the development of creativity, practical skills and personal qualities.

In the past decade, BRICS countries have achieved significant success in increasing secondary education coverage, the average length of schooling and reducing educational inequality. The greatest achievements are related to reducing gender and language barriers to educational access. There has been notable progress in narrowing the gaps between rural and urban students. The report shows that despite differences, the education systems of BRICS countries are united by a commitment to creating more inclusive and sustainable educational models, which can serve as an important reference for the international community.

While focusing on the specifics of BRICS countries shaping their own current education systems and the defining strategies for the future, we recognised that BRICS operates globally and the macrosystem has a global impact, and the factors of the chronosystem influence what we put forward.

At the same time, we clearly see and emphasise both the established basis of the BRICS countries' subjectivity and sovereignty in education policy as well as the prospects for its consolidation in the future. What was not considered in this report, but remains the subject of promising research and valuable discussions, is how the collective subjectivity of BRICS countries can manifest itself in educational politics.

APPENDIX

Executive Summary (table)

Context Challenge	Country cases	Country Policies
Demographic	**Brazil:** Brazil faces a two-pronged challenge in education due to demographic shifts and uneven population distribution across the country. The shrinking youth population, down to 34% in 2022 from 50% in the early 2000s, requires a re-evaluation of educational needs, particularly as universal basic education and widespread higher education access remain unrealised. Internal population distribution patterns create regional pressure points, demanding adjustments to accommodate student inflows and ensure equitable access, retention and success in education across all regions.	**Brazil:** Brazil addresses demographic challenges in education through policies like FUNDEB, which allocates resources to underserved networks with a large number of enrolled students. The Pé de Meia programme incentivises school attendance with grants to tackle low enrolment caused by child-age population disparities. Full-day education expansion is prioritised in the National Education Plan (2014-2025).
	Russia: Declining birth rates are contributing to teacher shortages, exacerbated by an aging workforce and a growing student-teacher ratio, particularly in urban areas where it can reach 1:20. Internal migration towards cities, driven by factors such as the decreasing purchasing power of teachers' salaries in rural regions, necessitates that schools adapt to changing demographics and address the growing shortage of educators. Pronounced internal migration associated with the movement of labour is creating demand for quality of life, including general and extracurricular education.	**Russia:** Russia is addressing population decline by calculating the optimal level of new school placements and staffing. Since 2025, migrant families are responsible for their children's Russian language proficiency. The school curriculum includes family studies and support for reproductive activities.
	India: India's school education faces demographic challenges with a large child-age population creating overcrowded urban schools and resource-strained rural schools. Migration is increasing urban enrolment and language diversity issues. Girls face dropout challenges at secondary levels, with 49 million out of school, despite improved enrolment. Economically disadvantaged families exacerbate these issues. The recent high birth rate led to the need to open more schools. The birth rate is now expected to decline, which may require a restructuring of the school network.	**India:** The NEP 2020 addresses demographic challenges in education with specific measures like the 'Gender-Inclusion Fund' and 'Inclusion Fund' to support disadvantaged groups, including girls and migrants. Initiatives such as Open and Distance Learning, native language instruction and residential schools (e.g., Kasturba Gandhi Balika Vidyalayas) enhance accessibility. It emphasises universal participation, dropout prevention, education rooted in cultural values, vocational education, the role of technology and robust infrastructure to adapt to child-age population dynamics.
	South Africa: Demographic challenges in South Africa's education system stem from a large child-age population (27.5% under 15), which puts a strain on resources, infrastructure and staff. Public classrooms tend to be overcrowded, with a teacher-to-student ratio of 1:35 in primary schools and 1:27 in secondary schools. Rural-urban migration disrupts family support and depletes rural teaching talent. Girls face cultural and religious biases that prioritise boys' education, early marriage and domestic roles, compounding gender disparities in access and outcomes. The educational system is still deeply influenced by the legacies of colonialism and apartheid, which created vast disparities in access, quality and outcomes.	**South Africa:** The ASIDI improves school facilities to address population pressures. The NFRE enhances rural access and equity, aiding migrants and population shifts. The Language in Education Policy and Use of Official Languages Act promotes multilingualism for inclusion.
	China: China's school education system faces demographic challenges, such as a declining child-age population due to low birth rates, which is reducing demand for educational infrastructure. Migrant children, nearly 33.64 million of them, complicate resource allocation between provinces and localities. Despite past gender disparities, girls now outperform boys in attendance, highlighting evolving educational dynamics and progress in achieving equality.	**China:** China's education policies address demographic challenges by expanding urban schools to adapt to child-age population growth and ensuring migrant children have equal access to education. Measures include improving small rural schools and boarding facilities, strengthening rural teaching staff and supporting left-behind children. Girls' education benefits from quality enhancements in ethnic minority regions and initiatives fostering comprehensive development.

Cultural, Religious, and Linguistic Specificities	**Brazil:** Brazil's cultural, religious and linguistic diversity is a challenge for education. Linguistically, the dominance of Portuguese limits the recognition of over 274 Indigenous languages. Religious pluralism, tied to Catholicism, Afro-Brazilian beliefs and Indigenous traditions, demands secular, inclusive education. Cultural tensions from resisting racial self-declaration and including minorities like quilombolas make equitable representation essential, complicating curricular standardisation and fostering inclusion.	**Brazil:** Brazil's National Education Plan (2014-2025) addresses cultural and linguistic specificities through such goals as promoting inclusive, quality education for all, emphasising teacher training and collaboration across governments. Programmes like Pé de meia provide financial incentives and support cultural inclusion. While no explicit religious strategies or linguistic projects were identified, broader inclusive projects foster diversity, benefiting underserved groups such as Indigenous populations and those with disabilities.
	Russia: Cultural, religious and linguistic specificities in Russia pose challenges to school education. Cultural diversity across 22 national republics with distinct traditions and socio-economic inequalities complicates resource allocation. Religious plurality, including Orthodoxy, Islam and others, influences policy-making for equitable access. Linguistic diversity with over 155 languages leads to unequal native language support, marginalising many minority groups in educational participation. An important task in a country with a huge territory and cultural diversity is to create a unified educational space and preserve and support the unique identity of ethnic groups and Indigenous peoples.	**Russia:** To address cultural, religious and linguistic specificities, Russia balances the strengthening of the Russian language with people's rights to speak their native language, preserving national languages through study plans and digital support. Cultural heritage is promoted via curriculum and extracurricular activities. "Conversations about Important Matters" lessons expand native history and culture knowledge. Interethnic and interreligious harmony is a key focus within language policy in education. The curriculum includes provisions for studying Russian, the state languages of republics and native languages, thereby fostering respect for diverse cultures and traditions. Nomadic schools exist to support the culture and traditions of Indigenous peoples. The curriculum includes traditions of local culture. Religious organisations have the opportunity to carry out educational activities. The school curriculum includes a one-year course on the fundamentals of religious cultures and secular ethics.
	India: India's diverse cultural, religious and linguistic landscape presents challenges in school education. With over 19,000 languages and dialects, linguistic diversity affects home-school connections and increases dropout rates. Integrating value education that respects all cultures and religions is difficult but necessary for sustainable living and national unity. The complex social fabric influences education quality.	**India:** The NEP 2020 addresses cultural, religious and linguistic specificities through policies that promote native language instruction, cultural rootedness and inclusive spaces. Strategies include teacher training against stereotypes, standardising Indian Sign Language and fostering multilingualism. Projects such as Ashram Schools, Eklavya Model Residential Schools and Bharatiya Bhasha Samiti ensure tribal representation, linguistic inclusivity and digital access to Indian art, culture and languages.
	South Africa: The legacy of apartheid continues to impact educational inequalities, requiring ongoing efforts to address the historical disadvantages faced by Black students. The diverse religious landscape requires policies that ensure religious freedom and respect for different faiths within the education system. While eleven languages are officially recognised, the dominance of English in education poses challenges for learners whose native languages are different, necessitating multilingual approaches to ensure equal access to education.	**South Africa:** The Language in Education Policy promotes multilingualism using mother-tongue instruction. The Use of Official Languages Act mandates the use of at least three official languages in government communications. The Inclusion of Indigenous Knowledge Systems into the formal education system helps preserve cultural heritage and provides relevant learning experiences for diverse students.
	China: Cultural and religious diversity poses challenges for education in China, but their impact on school education is not significant. China promotes the use of the national language while preserving cultural heritage and local dialects. The characteristics and specifics of denominations do not have a noticeable impact on school education in China. The government systematically supports policies that aim to form civic identity through the study of history and culture.	**China:** The Five-Year Plans enhance education quality and standards in ethnic minority regions and promote the national common language. The Plans ensure the steady provision of bilingual education and enhance training programmes for bilingual teachers. The Plans support the increased availability of special needs education for groups with disabilities, enhancing educational conditions and quality in this sector and ensuring special schooling for individuals with disabilities. The most important policy focus is the need to integrate centuries-old cultural history and rich spiritual tradition into education, in particular, in the framework of moral education.
Poverty	**Brazil:** Poverty exacerbates inequalities in access to quality education, disproportionately impacting marginalised communities, particularly in the North and Northeast regions, where income is less concentrated compared with the industrialised Southeast and South. This leads to challenges such as high absenteeism, grade repetition and increased dropout rates, limiting opportunities for social mobility and perpetuating educational disparities.	**Brazil:** Brazil is tackling poverty through comprehensive educational strategies. The FUNDEB policy directs financial resources to disadvantaged areas and aims to equalise educational opportunities. Complementing this, the National Professional Salary Floor seeks to elevate teacher compensation and enhance education quality. Initiatives such as the Full-Time School programme expand learning time, while Pé de meia provides direct financial support to students, incentivising school enrolment and graduation, and ultimately fostering long-term economic mobility.

	Russia: Teacher salaries, especially in rural schools, impact educational quality, hindering human capital development and social mobility. There are still numerous poor families, which does not limit access to free education, but affects limited access opportunities, including extracurricular education, as well as the home-based learning environment. There are schools in Russia where children from poor families are concentrated, which increases the risks for achieving high-quality educational results.	**Russia:** To address poverty-related educational inequalities, Russia focuses on equity through unified educational standards and the "School of the Ministry of Education" project. The National Education Project (2018-2024) aims to level educational conditions. Support is given to schools in challenging conditions via projects like "500+". Free textbooks and hot meals are provided alongside infrastructure improvements, especially in rural areas. Support for children from poor families is provided through social policy measures (allowances and benefits).
	India: Poverty significantly impacts school retention, leading to increased dropout rates, particularly as children from economically disadvantaged families often join the unskilled labour force after the age of 14 due to the Child Labour (Prohibition and Regulation) Act 1986. This ultimately influences the state's GDP and subsequent Gross Enrolment Ratio (GER), hindering both individual and national development.	**India:** The NEP 2020 combats poverty through such measures as intensifying vocational education, the 'Inclusion Fund' and the 'Gender-Inclusion Fund' to eliminate disparities. It emphasises ODL, residential schools like Kasturba Gandhi Balika Vidyalayas and the Mid-Day Meal Scheme. Financial support includes the Right of Children to Free and Compulsory Education Act or Right to Education (RTE) Act's 25% private school seat reservation and initiatives such as Ladli Laxmi Yojna, enhancing access for economically weaker children. ULLAS is provided for all citizens aged 15 and older.
	South Africa: Poverty in South Africa is deeply intertwined with the enduring legacy of apartheid, creating persistent educational inequalities. This complex interplay disproportionately impacts infrastructure, resources and teacher quality, particularly in historically disadvantaged communities. These inequalities further perpetuate cycles of poverty and significantly limit social mobility for many South Africans.	**South Africa:** The No-Fee Schools Policy eliminates school fees in impoverished communities, while the NSNP provides free meals to students in the poorest schools. The NNSSF allocates additional funding to poorer schools based on socio-economic context. These pro-poor policies reduce financial barriers, increase educational participation and alleviate poverty-related challenges.
	China: Poverty impacts education in rural China and contributes to disparities in access and outcomes. In 2022, 65.22% of China's population was classified as permanent urban residents. In 2022, only 14.7% of students in elementary, junior secondary and regular senior high schools were from rural areas, with the majority (85.30%) from counties, towns and urban areas. Specifically, in elementary schools, 18.91% of students were from rural areas, while in regular senior high schools, this figure dropped to just 4.03%.	**China:** The Five-Year Plans address poverty by increasing educational investment in underdeveloped regions, ensuring compulsory education standards and improving facilities in rural and minority areas. These plans aim to achieve balanced resource allocation, increase completion rates and provide financial aid to disadvantaged students, thereby promoting equal access to education and reducing poverty.

Urban-Rural and Interregional Divide	**Brazil:** Deeply rooted socio-economic and racial inequalities intersect with the urban-rural and interregional divide, creating a system where access to quality education is vastly unequal. Rural areas and the Northern regions have less access to education. Decentralisation, while ensuring broad reach, leads to disparities in resource allocation among the country's 27 states and 5,570 municipalities, affecting education funding.	**Brazil:** Brazil addresses urban-rural and interregional educational divides through several initiatives. Policies such as FUNDEB direct federal resources to underdeveloped networks, while the National Professional Salary Floor ensures fair teacher wages. Strategies include the Full-Time School programme for extended learning and state-aligned education plans. Projects like Pé de meia offer financial incentives to students.
	Russia: The urban-rural divide in Russia exacerbates educational inequality with rural schools lacking resources such as warm toilets and internet access, unlike their urban counterparts. Regional disparities further deepen this divide, as evidenced by infrastructure and teacher qualifications. Decentralisation leads to funding discrepancies; regional authorities handle teacher salaries, while municipalities manage infrastructure, creating uneven educational opportunities across regions. There is still a gap in staff, infrastructure and the quality of results, and funding is being provided to separate deprived areas. This is due to the economic opportunities of the regions that have the authority to fund (the difference in conditions) school education. National projects aim to level the playing field by modernising equipment, but disparities persist, requiring targeted support for schools in challenging conditions to ensure equitable access to resources and quality teaching.	**Russia:** Russia addresses the urban-rural and interregional divide with initiatives such as the "School of the Ministry of Education," which ensures unified standards for learning conditions, education, upbringing and school climate, and "Growth Point" centres to enhance STEM education in rural areas. The National Education Project (2018-2024) is improving infrastructure, while school bus programmes ensure transport accessibility. The "Zemsky Teacher" ("Rural Teacher") project attracts educators to rural areas with financial incentives. The project aims to eliminate the gap in educational outcomes between urban and rural students and to develop modern competencies. The project provides financial incentives and benefits for teachers relocating to rural schools. Free school buses are offered for students in remote and sparsely populated rural areas. The central government is trying to equalise inter-regional inequality through subsidies and subventions.
	India: Rural areas have more schools, but lower retention rates compared with urban areas where schools are more than twice as crowded. Disparities persist, as reflected in lower retention rates in rural areas (18%) compared with urban areas (39%) from primary to higher secondary levels in 2021-2022, requiring targeted interventions. States with lower per capita income face challenges in funding education, which leads to under-resourced schools and impacts education quality. This divide affects student progression and exacerbates dropout rates.	**India:** The NEP 2020 addresses urban-rural and interregional divides by increasing resources for rural schools, conducting Olympiads in regional languages and training local meritorious students, especially girls, as teachers and role models. It emphasises setting up rural libraries, providing learning materials for students with disabilities and leveraging technology to bridge the digital divide. Open and Distance Learning improves accessibility for remote areas.

	South Africa: The urban-rural divide in South Africa's education system is due to disparities in infrastructure, teacher quality and resources. Rural schools often lack essential facilities and qualified teachers, hindering educational quality, while urban schools benefit from better funding and resources. A shortage of qualified teachers contributes to overcrowded classrooms, particularly in disadvantaged and rural communities. Teacher quality is significantly impacted by geographic location, with rural schools often having teachers with lower qualifications and less access to professional development opportunities.	**South Africa:** The NFRE addresses infrastructure, curriculum relevance, teacher capacity and community involvement in rural schools. ASIDI improves rural and township school infrastructure. The CRDP and National Rural Development Strategy focus on rural economic alignment, holistic area development and poverty alleviation, bridging the urban-rural education divide.
	China: The urban-rural divide in China leads to unequal educational investment, as evidenced by disparities in off-campus tutoring and teacher quality. Funding imbalances persist between regions, with central and western areas lagging behind eastern regions in teacher qualifications and educational expenditure. This divide exacerbates educational inequality across different socio-economic backgrounds.	**China:** To address the urban-rural divide, the current policy consolidates compulsory education, improves education standards, expands urban schools and ensures migrant children's access to education. It enhances rural school conditions, strengthens teaching staff and improves teaching quality. There's increased educational investment in central, western, remote and minority-inhabited areas. The policy also improves care for left-behind children and reduces dropout rates. There is also focus on improving rural teachers' quality through enhanced training, investment and supportive policies.
Inclusion	**Brazil:** Educational and social inequality between people with and without disabilities is significant in Brazil. Specialized schools exist, but mainstreaming is prioritised. A large percentage of people with disabilities are illiterate or have incomplete primary education. Enrolment in higher education is less than 1% for students from special education. Many teachers lack the specialised training needed to support these children effectively. Disparities persist in early childhood education and access to primary and secondary education.	**Brazil:** Broader initiatives, such as intersectoral educational policies and programmes like expanded full-time schools, improved teacher training and equity-focused public investment, could indirectly promote inclusion and accessibility for children with disabilities in Brazil's education system.
	Russia: Russia faces significant hurdles in integrating children with disabilities into mainstream education. Many teachers lack adequate training to support these students effectively, leading to suboptimal learning environments. A shortage of specialised professionals, such as speech therapists and disability specialists, further compounds the issue, hindering inclusive education efforts and leaving many children underserved.	**Russia:** Russia ensures inclusion through legal rights to general education for children with disabilities, which is supported by federal standards and adaptive programmes. Schools are becoming more physically accessible, with specialised textbooks and teacher training. Special funding norms are allocated, and while special schools were initially reduced, the network was maintained to offer families a choice.
	India: The enrolment of CWSN is low, at 0.89% of total enrolment. Girls with disabilities are substantially underrepresented compared with boys. The education of children with disabilities is an area of distress that requires proper procedures to bring them to school and the creation of inclusive learning environments with suitable resources.	**India:** To support inclusion and children with disabilities, NEP 2020 advocates for early identification mechanisms, accessible learning materials and technology-based interventions. Initiatives such as PRASHAST facilitate early screening, while Samagra Shiksha aims to improve school effectiveness through equitable learning outcomes. The RPWD Act 2016 ensures the rights of persons with disabilities and promotes inclusive education.
	South Africa: Children with disabilities in South Africa face significant challenges in accessing quality education due to inadequate resources, poorly trained teachers, and limited infrastructure. Many schools lack the facilities and support systems necessary for inclusivity, while geographic and socio-economic disparities further marginalise these children, exacerbating their exclusion from effective learning environments.	**South Africa:** The SIAS aims to identify and support children with learning barriers early on. The National Integrated Early Childhood Development Policy (2015) integrates education, health, nutrition and psychosocial support for holistic development, also aligning early childhood education with the formal schooling system. The Funza Lushaka Bursary Programme provides financial support for prospective teachers. ASIDI improves infrastructure in rural and township schools.
	China: In 2023, China had 912,000 special education enrolments, including 341,000 students in special education schools, making up 37.42% of total enrolments. These schools waive tuition for compulsory education and offer fee reductions for disadvantaged families. Various educational settings, including inclusive education in regular schools, support students with disabilities, yet challenges in resources and integration persist.	**China:** China's Education Modernisation 2035 plan, along with other Five-Year Plans, include increasing special needs education availability for groups with disabilities and enhancing educational conditions and quality in this sector. It promotes education for ethnic minority students via bilingual education and enhanced training programmes for bilingual teachers. The Five-Year Plans also improve care for left-behind children and reduce dropout rates in compulsory education.

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AUTHORS

Brazil

Andréa Barbosa Gouveia, PhD, Full Professor at the Education Sector, Federal University of Paraná, ORCID: 0000-0002-8260-2720; e-mail: andrea-gouveia@uol.com.br

Geovana Mendonça Lunardi Mendes, PhD, Full Professor at Santa Catarina State University. ORCID: 0000-0002-8848-7436; e-mail: geovana.mendes@udesc.br

Russia

Ilya Denisenko, PhD, Leading Expert, Pinsky Centre of General and Extracurricular Education, Institute of Education, HSE University, ORCID: 0009-0002-8972-3952; e-mail: idenisenko@hse.ru

Ivan Ivanov, PhD, Senior Research Fellow, Pinsky Centre of General and Extracurricular Education, Institute of Education, HSE University ORCID: 0000-0001-5036-8899; e-mail: iyivanov@hse.ru

Konstantin Anchikov, Expert, Pinsky Centre of General and Extracurricular Education, Institute of Education, HSE University, ORCID: 0000-0002-9021-7339; e-mail: kanchikov@hse.ru

Sergey Kosaretsky, PhD, Director, Pinsky Centre of General and Extracurricular Education, Institute of Education, HSE University, ORCID: 0000-0002-8905-8983; e-mail: skosaretski@hse.ru

Sergey Zair-Bek, PhD, Leading Expert, Pinsky Centre of General and Extracurricular Education, Institute of Education, HSE University, ORCID: 0000-0001-6390-2296; e-mail: szair-bek@hse.ru

Tatiana Mertsalova, PhD, Leading Expert, Pinsky Centre of General and Extracurricular Education, Institute of Education, HSE University, ORCID: 0000-0003-1482-1988; e-mail: tmertsalova@hse.ru

India

Vandana Saxena, PhD, Professor, Department of Education, University of Delhi, ORCID: 0009-0006-1284-0412; e-mail: vsaxena@cie.du.ac.in

China

Xintong Jia, MSc, Research Associate, Centre for World-Class Universities, School of Education, Shanghai Jiao Tong University, ORCID: 0009-0002-0335-2768; e-mail: jiaxt@sjtu.edu.cn

Ziyu Yu, PhD Candidate, School of Education, Shanghai Jiao Tong University, ORCID: 0009-0006-1591-3349; e-mail: yuziyu797@sjtu.edu.cn

Zhuolin Feng, PhD, Professor, Centre for World-Class Universities, School of Education, Shanghai Jiao Tong University, ORCID: 0000-0001-8310-4304; e-mail: zlfeng@sjtu.edu.cn

South Africa

Liesel Ebersöhn, PhD, Director, Centre for the Study of Resilience, Department of Educational Psychology, University of Pretoria. ORCID: 0000-0002-2616-4973; liesel.ebersohn@up.ac.za

Marisa C. Leask, PhD, Post-Doctoral Fellow, Centre for the Study of Resilience, University of Pretoria. ORCID: 0000-0002-7443-267X; marisa.leask@up.ac.za

Phumzile N. Langa, PhD, Director for Rural Education, Department of Basic Education. ORCID: 0009-0005-9076-6679; Langa.P@dbe.gov.za

Report “Transformation of General Education in BRICS Countries” Prepared by the BRICS Expert Council – Russia with the Support of the Institute of Education, HSE University

Edited by: Victoria Panova, Sergey Kosaretsky, Ivan Ivanov

Project coordinators: Evgeniy Terentyev, Valeriia Gorbacheva

Copy editor: Todd Jackson

Authors: Konstantin Anchikov, Ilya Denisenko, Liesel Ebersöhn, Zhuolin Feng, Andréa Barbosa Gouveia, Ivan Ivanov, Xintong Jia, Sergey Kosaretsky, Phumzile N. Langa, Marisa C. Leask, Geovana Mendonça Lunardi Mendes, Tatiana Mertsalova, Vandana Saxena, Ziyu Yu, Sergey Zair-Bek

The report “Transformation of General Education in BRICS Countries” explores the diverse educational frameworks in Brazil, Russia, India, China and South Africa, highlighting their unique socio-economic contexts and strategies for addressing challenges related to school education. It emphasises the need to adapt educational policies to local conditions while fostering inclusive systems. The report examines successful policies, underscoring the importance of tailoring international standards to local environments. BRICS nations play a major role in global education, with both shared characteristics and notable differences shaped by unique socio-economic backgrounds. Key challenges include inequalities in access to and the quality of education, particularly between urban and rural areas, as well as teacher training and aligning education with labour market demands. Approaches to inclusive education emphasise programmes for children with special needs and diverse cultural groups. Countries are increasing funding for education and developing curricula focused on modern requirements, including STEM and vocational training. Digital technologies are being applied to enhance access and quality. The report addresses environmental and social aspects, such as climate change’s impact and community involvement in school management. It advocates for exchanging best practices among BRICS nations to solve common problems and achieve sustainable development goals in education, underscoring the need for international collaboration to ensure sustainable development and social justice.

BRICS Expert Council – Russia

11 Pokrovsky Boulevard, Moscow

info@bricscouncil.ru

www.bricscouncil.ru

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