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Global Agendas and Education Reforms

A Comparative Study

Edited by
Birol Akgün · Yusuf Alpaydın

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Birol Akgün · Yusuf Alpaydın
Editors

Global Agendas and Education Reforms

A Comparative Study

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Preface

Education is a dynamic field that reflects the evolving global landscape and the diverse needs of societies. In the complex interplay of global dynamics and local realities, educational systems around the world grapple with challenges, opportunities, and the imperative to reform. The Maarif Global Education series, in collaboration with Palgrave Macmillan, is proud to present this meticulously curated academic book, *Global Agendas and Education Reforms: A Comparative Study*, which delves into the multifaceted dimensions of education reform across diverse countries.

As we stand at the precipice of the third decade of the twenty-first century, the global educational landscape is undergoing unprecedented transformations. The forces of globalization, technological advancements, and socio-political shifts are reshaping the priorities of educational systems across continents. This book serves as a comprehensive exploration of these shifts, offering readers a panoramic view of the challenges and innovations in education from various corners of the globe.

The first part of this book scrutinizes the intricate balance between global aspirations and local challenges. In Algeria, the dilemmas of globalization, equity, and decolonization are laid bare as the nation grapples with the complexities of aligning its education system with global imperatives while ensuring cultural relevance and equity. Across the African continent, the discourse on linguistic diversity in the school context comes to the forefront, examining the challenges and successes of implementing policies that address the unique linguistic tapestry of the region.

As the chapters unfold, we journey to Kazakhstan, where international integration and nationalization efforts intersect, shaping the trajectory of education reform. The preparation for education in emergencies in Pakistan reveals the urgency and complexity of reform in regions facing immediate challenges. Meanwhile, the examination of the Slovak higher education system provides insights into the nuances of development within the European context. The comparative study of systemic education reforms in Ukraine, amid the backdrop of war and modernization, adds a layer of complexity to our understanding of the global–local dynamics in education.

Part II navigates the evolving terrain of curriculum and teacher training in the context of twenty-first-century skills and new technologies. The chapters traverse the educational landscapes of the USA and China, exploring AI-supported reforms that have the potential to revolutionize the way we approach education. South Korea's educational leap forward is examined, highlighting reforms in pedagogy and curriculum through digitalization and innovation, providing valuable insights into the role of technology in shaping the future of education.

From the reformation of the Islamic religious education curriculum and teacher training in Malaysia to the impact of global agendas on vocational education and teacher professional development in Turkey, the section offers diverse perspectives on the changing educational paradigms. These chapters underscore the necessity of adapting education to the demands of a digital age, equipping students and educators with the skills and knowledge necessary for success in a rapidly evolving world.

In the final part, the focus shifts to the axes of internationalization in education, including accreditation, mobility, and diversity. The Gulf countries' vision of internationalization in higher education is subjected to a comparative analysis, shedding light on the regional variations in approach. The interplay between internationalization, sustainability, and education quality assurance mechanisms is explored in Georgia, offering valuable insights into the delicate balance required for fostering global engagement while maintaining educational standards.

The book also delves into the global agendas in higher education and current educational reforms in Albania, providing a glimpse into the diverse ways in which nations respond to global imperatives. The concluding case study on the relationship between internationalization and innovation in Canadian teacher training programs ties together the

threads of the internationalization narrative, emphasizing the symbiotic relationship between a global perspective and innovative educational practices.

As the editors of this compilation, we are immensely grateful to the scholars and researchers who have contributed their expertise and insights to create a comprehensive and comparative study of global education reforms. Their dedication has resulted in a rich tapestry that not only highlights the challenges and achievements of various nations but also provides a valuable resource for policymakers, educators, and researchers in the field of education.

In conclusion, *Global Agendas and Education Reforms: A Comparative Study* aims to contribute to the ongoing dialogue on shaping education for a dynamic and interconnected world. By fostering a deeper understanding of the global–local dynamics and the evolving landscape of education, this book strives to empower educators, policymakers, and researchers to make informed decisions that will positively impact the future of education worldwide.

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Educational Reform in Algeria: Dilemmas of Globalization, Equity, and Decolonization

Fella Lahmar

Introduction

Algeria's education system was founded on a socialist economic model. The state religion of Islam has provided its core values in alignment with the 1963 Constitution and the country's national goals of equality, independence, and liberation. Algeria's drive toward Arabization aimed to decolonize and reclaim the Algerian identity and reaffirm its Arab-Islamic heritage (Jacob, 2020).

Post-independence in 1962, Algeria had a literacy rate of approximately 10% (Benrabah, 2014). Currently, the education system serves an ever-growing population. In 2020, Algeria's total population stood at 43.85 million. With an annual population growth of 1.8 million and a youthful demographic profile where 31% of the total population are between the ages of 0–14 years and only 7% are 65 years old or older, Algeria requires quality education and more of it. Adult literacy has risen considerably, reaching 81% in 2018 for those aged 15 years or over (75% for females, 87% for males). Youth literacy rates in 2018 were 97% for individuals

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aged 15–24 years (98% for males, 97% for females), indicating the near-elimination of gender disparity (Liu et al., 2021).

The growth in demand for education has cast a spotlight on the existing educational system, leading to questions about its adaptability and capacity to serve the educational needs of a burgeoning young population. In response, the Algerian government has invested heavily in the education sector, which has seen approximately 10.55 million pupils enrolled in the 2021–2022 academic year and which is supported by around 510,498 teachers and 287,193 administrative staff. Educational institutional structures numbered 28,585 for the 2021–2022 school year and were comprised of 20,100 primary schools, 5857 intermediate schools, and 2628 high schools (MNE, 2022).

As of 2023, Algeria's education system features four key stages: primary, lower-secondary, upper-secondary, and higher education, with standardized curricula across schools (MNE, 2022). While publicly funded institutions dominate the system, private schooling is on the rise, along with controversies regarding identity issues (Associated Press, 2023). Ministry of National Education (MNE) oversees national education (NE), and the Ministry of Higher Education and Scientific Research (MESRS) manages the higher education (HE) sector.

Alongside government investment, a more comprehensive understanding of the educational landscape in Algeria is required, particularly in the context of its sociocultural and economic challenges, as well as its colonial legacy. As presented in Framework Act no. 08-04 (January 23, 2008), Algerian education reform represents a complex interplay of global influences and local enactments. This 2008 Act, particularly Chapters I and II, clarified the roles of the school and spiritual and civic values by emphasizing the Algerian identity; enhanced the unity of the nation by promoting values associated with the triad of Islam, Arabism, and the Amazigh identity; and reinforced this through citizenship education and openness to global movements and integration with them. Critical analysis beyond mere policy statements is essential for exposing the underlying power relations and sociocultural implications of these reforms. In our 2023 book chapter, Abbou and I (2023) discussed the ramifications of reforms for leadership and administration within the Algerian HE sector as the education system transitions toward market-driven models. We examined how cultural factors and personal networks influence leadership dynamics and how policies are interpreted and enacted.

In this chapter, I explore NE as the foundational level of education in Algeria and examine the dynamics, dilemmas, and challenges encountered in the educational reforms in Algeria, particularly in the context of the interplay between globalization, equity, and decolonization. Additionally, the chapter highlights the issues of globalization and its implications for curriculum, pedagogy, and cultural identity in the Algerian education system. By addressing these dilemmas, a deeper understanding of the complexities inherent in educational reforms in Algeria emerges, offering insight for policymakers and educators who navigate the balance among globalization, equity, and the decolonization of education.

This chapter is divided into four main sections, beginning with an overview of the key historical and contemporary reforms, followed by an outline of the research methodology. The third section examines the impact of the reforms' implementation on the curriculum, while the fourth section then discusses the emerging themes with a focus on the issues around curriculum and pedagogy. I then conclude this examination with a synthesis of the findings, advocating a holistic approach to education.

Overview of Decolonization and Reform in Algerian Education

Educational Reforms and Linguistic Identity in Post-Independence Algeria

While the competence-based approach has driven educational reforms in Algeria since 2003, the questions remain of what being competent means and how learners can be made competent. This is not a technical question, as its responses are embedded in the ontological and epistemological frameworks that drive its definitions, curriculum design, pedagogies, and quality benchmarks. Beyond the knowledge and techne levels, competence demands action, the effectiveness of which develops within its unique sociopolitical context (Rey, 2014).

In the Algerian educational landscape, the linguistic debate presents a deeper complexity of power dynamics beyond the linguistic techne, which intersects with the critical aspects of defining what competence means. The French colonial legacy has significantly influenced Algeria's administrative and educational structures, most notably through the installment of French as the state's official language. Algerian independence in 1962

initiated the (re)establishment of a national identity distinct from colonial influences. The Algerian Constitution of 1963 laid the foundation for a socialist democracy and enshrined education as a fundamental right, making the state responsible for providing and funding education. This set the precedent for an education system heavily controlled by the state, including its quality assurance (Lahmar & Abbou, 2023). In 1976, Ordinance No. 76-35 was introduced, which includes the organization of education and training. This ordinance explicitly anchored the education system within the framework of Arab-Islamic values and socialist principles. It mandated compulsory education for all children from ages 6 to16, and stipulated that education should be free at all levels. The ordinance also established Arabic as the medium of instruction (Boumediene, 1976, Articles 2, 5, 7, and 8).

Language policy and Arabization present another complex key aspect in understanding the Algerian educational system and decolonization. The French language represented colonial dominance and oppression (Benrabah, 2014). A primary objective of the newly independent Algerian state was to establish a cohesive national identity, leading to the Arabization policy. This policy sought to replace French with Arabic as the medium of instruction in schools and administration, and Ordinance No. 76-35 laid the groundwork for this (Boumediene, 1976). In 1978, elementary schools shifted to instruction in Arabic, and by the academic year of 1988–1989, Arabic had firmly been installed as the language of primary, intermediate, and secondary education (Taleb-Ibrahimi, 2007).

The Arabization policy sought to develop national unity but instead sparked debates regarding the linguistic and cultural diversity within Algeria. The concerns of the Amazigh community (also known as Berber), who represent a significant demographic in Algeria, epitomize this complexity. Despite Amazigh, which is made up of a spectrum of dialects spoken by North Africa's indigenous communities, receiving official status as a national language in 2003, institutional advocacy for the language and its cultural derivatives remains a point of contention. The 2008 Act sought to reconcile these disparities, not only by emphasizing the confluence of Islamic, Arab, and Amazigh identities but also by mandating the structured integration of the Amazigh language into the educational framework (Framework Act no. 08-04, January 23, 2008). Nevertheless, this stance has generated other challenges. The drive for a standardized Amazigh linguistic curriculum has been critiqued for potentially overlooking regional dialectical nuances, thereby inadvertently

perpetuating the very marginalization it sought to redress. Hence, navigating Algeria's complex language politics is pivotal for devising and executing nuanced educational reforms while concurrently sidestepping curriculum saturation and the anticipatory resistance.

Despite Arabization, the French language has continued to play a significant role, particularly in HE and on the job market. While the humanities and social sciences had largely transitioned to Arabic, scientific fields in HE remained predominantly French-speaking. Challenges arose for students educated in Arabic throughout NE who were suddenly expected to shift to French at the HE level. In the educational reforms of the early 2000s, French was reemphasized alongside other foreign languages in the Algerian education system (Taleb-Ibrahimi, 2007). Ironically, English is presented as a neutral non-colonial option in the Algerian collective discourse, a counterforce to French neocolonialism and cultural, economic, and political control. Thus, endorsing English while affirming one's dislike of French has emerged as an expression of an authentic Algerian identity anchored in Arabic (Jacob, 2020).

In these politically and culturally charged contexts, the perceived identities of educational ministers as potent leadership and administrative symbols responsible for building a national identity have remained ongoing areas of contention beyond the classroom (Saidouni, 2021). As Jacob (2020, p. 1016) expressed, "The distinction between French-speakers and Arabic-speakers is important not in defining their linguistic practices but in situating oneself in the political landscape."

This linguistic context helps explain the reform following the *Hirak* [Algerian political uprising], which introduced English as a primary school subject starting in the 2022–2023 school year. In May 2022, the President of Algeria, Abdelmadjid Tebboune, issued a directive mandating the incorporation of English into the third year of primary education alongside French: a significant change in the country's linguistic trajectory that highlights Algeria's fluctuating linguistic policies (Presidency of the Republic, 2022). These policies were shaped by a colonial past and an evolving identity. However, while the rise of English may erode French influence, concerns have been raised about the hasty implementation of reforms and the overload of the curriculum (Al Jazeera Media Network, 2022).

As the above depicts in terms of the approaches to reform, decolonization, and identity, the Algerian education system has seen multiple transformations since its independence in 1962. Recognizing the broader

historical, cultural, and political dynamics that have played out in Algeria is essential to the changing language policies within the system.

Impact of Global Agendas and Reforms on the Algerian Education System

Algeria's educational landscape has been significantly influenced by its wider political and economic conditions. The 1980s economic crisis, followed by a decade of political unrest and violence in the 1990s, created an impetus for reform that materialized in the early 2000s. The Algerian government viewed education as an essential vehicle for both political stability and economic prosperity and as a catalyst for the country's evolution in parallel with the global landscape. In this light, the 1980 restructuring project known as the University Map became a forerunner in aligning HE with national development objectives (General Secretariat of the Government, 1989). This heralded a paradigm shift from an entrenched socialist educational system to a more market-oriented model. The 1989 reforms bolstered this transition by emphasizing the augmentation of national capabilities and competencies (MNE, 2016).

The turn of the millennium saw the appointment of the National Commission for the Reform of Education, which identified a deterioration in the educational system characterized by declining pass rates on national exams and soaring dropout rates. The subsequent 2004 reform signified an epochal transition from an administered economy to one that embraced market mechanisms. This had profound ramifications for the restructuring of NE and HE. An integral component of the reforms was the reorganization of compulsory education into primary and middle school education in the 2005–2006 school year. The general and technological secondary education system, which had previously been situated beyond compulsory education, now aimed to foster holistic student development. This emphasized the acquisition of foundational knowledge while also instilling civic awareness and responsibility (MNE, 2016).

Although the reforms have had intrinsic momentum, external drivers such as the United Nations (UN) 2030 Agenda for Sustainable Development also exert pressure on Algeria to conform to certain educational goals. This pressure is also mirrored in the agendas of regional entities like the Arab League of Education, Cultural and Scientific Organization (ALESCO, 2022). The Algerian government itself has been vociferous in its claims of having democratized education. The Framework Act

no. 08-04 (January 23, 2008) on educational reform resonated with global educational agendas by emphasizing inclusivity and quality education for all and by promoting bilingualism, thus reflecting UNESCO's advocacy for comprehensive literacy. The Framework Act underscores lifelong learning, thus mirroring the UN Sustainable Development Goals' (SDGs) educational objectives, and encourages so-called modern pedagogical techniques, theoretically aligning with international standards for enhancing the critical thinking and problem-solving skills that are seen as crucial in today's globalized world. However, it is crucial to question how broader sociopolitical determinants might affect this avowed commitment to free and accessible education. This scrutiny is essential for overseeing the implementation of such principles in actual practice.

Moreover, the Framework Act no. 08-04 (January 23, 2008) delineates the Algerian educational system's efforts at aligning global pressures with the preservation of a national identity. The adoption of a market economy and the integration of scientific and technological knowledge suggest compliance with the neoliberal ideologies that dominate the global educational landscape. The concern arises over whether such market-driven approaches are consistent with Algeria's social and cultural fabric or if they stealthily impose frameworks that overlook local contexts such as language. Questions occur about the impetus behind these policies, as well as the power dynamics that are involved. Moreover, how are the various communities within Algeria affected? A global discourse on democratic values may not necessarily retain its significance or applicability in specific Algerian contexts. Hence, analyzing how these values are interpreted and enacted in educational settings and communities and how they engage with prevailing cultural norms is crucial. The role of stakeholders in the educational system, including teachers, students, and parents, requires attention. How these policies affect people's daily lives and practices and how stakeholders interpret or engage with these reforms are fundamental to the real-world implications of educational policy. For example, the ethos of equity raises probing questions. Does adaptation to globalization (as reflected in restructuring) lead to a more equitable educational landscape or does it exacerbate existing inequalities? Such an examination demands an appraisal of resource allocation, particularly regarding support measures for underprivileged students, and the repercussions of market-driven approaches on both the quality and accessibility of education (Braun et al., 2010). In addition, the interaction between globalization and the preservation of cultural heritage poses

intrinsic dilemmas. Hence, a critical analysis must account for a plethora of dimensions, including globalization, equity, and cultural preservation.

Methodology

This chapter is part of the Decolonizing Education for Peace in Africa (DEPA) research project in Algeria, which examines the values of reconciliation and peace within traditional Algerian art heritage. After receiving ethical approval from the Open University (HREC/4669/Raghuram/Lahmar), the study was conducted in Béjaïa, Aïn Beïda, Oum El-Bouaghi, Ghardaïa, and Tamanrasset, with additional follow-up insights from Guelma Province. The data in this chapter were gathered through semi-structured interviews with 15 participants involved in the Algerian education system. The group comprises nine parents (four fathers and five mothers), five female teachers (two primary, one lower-secondary, and two upper-secondary school teachers), and one male school head teacher. NVivo facilitated data exploration, while ChatGPT-4 was used to assist with the translation from Arabic to English and a critical review. As a native Arabic speaker with a native Algerian dialect (*Darija*), I double-checked the translations for accuracy. All data were anonymized before submission for translation or for NVivo coding. Nonetheless, acknowledging the limitations of both tools is important. I acknowledge that the analysis and write-up remain my own and are original.

Navigating the Complexity of Educational Reform: Insights from the Ground

Curriculum Overload and Relevance

A key theme shared across participants' evaluations of the education system is the overwhelming nature of the curriculum:

> An intensive program with long study hours is exhausting for children, teachers, and the administration alike. (Secondary School Head teacher)

> The system is directed toward smart students, as it does not consider differences among students. The curriculum is exhausting for both teachers and parents. Parents need to follow up with their children daily and re-teach

> at home so that students can absorb the information given in the classroom… The students study things they don't understand… As for the third year, it is a disaster! Students study two foreign languages alongside eight other subjects. In short, the program is cramming them with information. (Parent A)

That the curriculum is described as "exhausting for both teachers and parents" suggests that the quantity of content is prized above the quality of learning. A dense curriculum can overwhelm students and hinder their ability to absorb and retain information and develop advanced transferable skills beyond rote learning (Campbell-Phillips, 2020). This is particularly concerning in early education where foundational skills are critical. An overloaded curriculum also places undue pressure on teachers who must cover a vast amount of material in a limited timeframe (OECD, 2020).

Parent B also described the intensive and extensive curriculum. She noted the changes in curriculum and content, something similarly highlighted in three teachers' accounts and each parent account. For example, all parents were concerned about the early introduction of complex subjects. Parent B pointed out that third-year primary students are introduced to complex subjects and two foreign languages without adequate resources or teacher development to support their learning.

> Our children, the apples of our eyes, are exhausted because of this system, the abundance of the program, and the great amount that is not understandable… Our children's minds are burdened with programs that have no benefit... Children in their third year of primary school are asked to learn French and English, as well as civic education, which is mixed with scientific education. My God! Children do not have the ability to comprehend these subjects. Isn't there someone who can relieve our children and understand the difficulty of the matter? (Parent B)

The expressions "exhausted," "burdened," "relieve," and "difficulty" reflect the psychological strain the overloaded program causes. Parent B demanded that the educational system recognize the developmental stages of children and tailor the curriculum accordingly. While having children be exposed to a variety of subjects is beneficial, resources, pedagogy, and balance between breadth and depth are key to implementation, otherwise such variety can be counterproductive (OECD, 2020).

The introduction of English alongside French at an early stage is a controversial issue among parents. Parent B preferred the idea of English

being introduced first, then French. However, Parent C described the reform as "a wise decision." Parent C also highlighted the importance of a balanced and engaging curriculum that not only builds cultural capital but also prepares students for a globalized world through language learning. Besides curriculum content, Parent C raised the importance of children's motivation and engagement. Parents expressed concerns about the extensive program, fearing that its size and the inclusion of uninteresting and seemingly non-beneficial lessons might lead students to develop a dislike for these subjects. This raises questions about the appropriateness of the content and the methods used to engage students.

> The system has lengthy programs, especially in history and geography. We can't deny that students acquire culture from it, but the extent of the program and lessons that have no benefit and that students don't enjoy leads to them disliking these subjects. However, concerning learning the English and French languages for young children in primary education, I think it is a wise decision, and we will see its fruits in the near future. (Parent C)

> You find a primary school student studying Jugurtha and Masinissa. Are these lessons important for them? Of course not! They're only eight or nine years old! This is just one example. (Parent D)

Parental concerns about the content in history and geography and praise for language learning suggest a need for balance and prioritization in the curriculum. A critical analysis of which knowledge and skills are essential for students' holistic development and how the curriculum can be structured is crucial in the reform process to ensure that students are not overwhelmed. An overloaded curriculum also affects the quality of education. Pushing too much content on children without considering the depth of understanding and application can lead to superficial learning (Gouëdard et al., 2020; Sullanmaa et al., 2019).

Pedagogy and Teacher Education

Previous research shows how teachers, constrained by a rigid curriculum and limited resources, often resort to traditional didactic approaches

that prioritize rote memorization over critical thinking and active participation (Darling-Hammond et al., 2020). Accordingly, the teacher-centered model dominates the classroom, offering limited opportunities for student collaboration, inquiry-based learning, and the development of the twenty-first-century skills essential to global competition. This contradicts the goals for which the Algerian second-generation curriculum was ostensibly designed. The five teacher participants in this study confirmed the negative impact of curriculum overload on classroom engagement. Teacher A, an experienced teacher at both lower- and upper-secondary phases, said:

> The reforms were somewhat improvised; they were not developed according to a real study, which is why they failed to achieve their goals. There is a great overload in lessons; the number of lessons is not proportional to the [number of teaching] hours, yet the teacher is required to complete them according to a timeline that makes it impossible to cover all aspects of the lesson. If they do it, it is at the expense of some students, as the teacher is forced by the time constraints to deal only with high achievers.
>
> Also, overloading the curriculum with many terms that confuse more than benefit students, due to the curriculum being based on quantity over usefulness, negatively affects their learning. (Teacher A)

An implicit call is found for curricular relevance and an inquiry-based approach to curriculum reform that incites quality over quantity, where students are not just passive recipients of information. Another parent suggested that the focus is more on memorization and passing exams rather than on genuine learning and understanding. Overload and reliance on rote learning can stifle critical thinking and students' ability to apply knowledge in practical settings (Darling-Hammond et al., 2020). Furthermore, this can demotivate students and lead them to disengage from learning, as they may not see the purpose of what they are studying (Renninger & Hidi, 2019).

> The second-generation program is a disaster in every sense. It's packed with content that relies on rote learning, usually without application. They've adopted a program without proper study and applied it to our children as if they are lab rats. They teach them theoretically about computers on paper, but there are no computers!… From their first year of primary school, children are exhausted by exams. I consider it a failed system, a

> program designed only for the brightest, while the average and weaker students find themselves facing a huge challenge to just keep up. (Parent D)

Besides Parent D's criticism of curriculum overload and lack of relevance, curricular demands are not met by the capacities of students and teachers nor by available resources such as computers. The resource mismatch that Parent D mentioned indicates a lack of alignment among policy, planning, and resource allocation. The absence of the necessary resources not only impedes the learning process but may also send a message to the students about a lack of investment in their education. Moreover, the teachers mentioned the challenges of implementing a new curriculum, specifically referring to inadequate training and the subsequent discrepancies in applying the curriculum.

> [T]eachers did not receive proper training regarding the new curricula, which led to a significant variation in their application. Part of this difference is due to teachers not understanding some of what is in these curricula, so each group interprets it according to their own understanding. (Teacher A)

This account underscores the importance of interpretation and context when enacting policy, with adequate professional teacher development being needed to support the reforms. In one way or another, all teachers and parents in this study have called for a review of the current second generation of curriculum reforms.

> Change should begin from the first year by teaching only language and mathematics so students can master these two fundamental subjects. A change needs to happen in the third year, separating English and French so that they are not introduced [together]. Additionally, lessons in history and geography drain the students' energy at no benefit. The program should be reviewed. Recruiting and training teachers also need to be focused on; the problem lies with both the program and the teachers. (Parent E)

Parent E called for rethinking the curriculum, with an emphasis on core skills, structured language learning, and teacher quality. Their recommendations resonate with educational frameworks that stress building core competencies early on to support later learning (Campbell-Phillips, 2020). Their account reflects a concern not only about the relevance of

content but also the way it is taught, as well as an understanding that even the best of curricula can fall short if not adequately implemented by competent teachers (Sullanmaa et al., 2019).

Inequity in Educational Opportunities: Private Tutoring and Socio-economic Implications

The "one size fits all" approach does not cater to individual differences in learning styles, abilities, or interests. The theme of a disconnect between a limited range of pedagogical practices (teacher-centered, rote learning) and the diverse learning needs and preferences of students emerged in 14 participants' responses. Parent F believed the education system is tailored only toward students with high academic capabilities, while others are neglected:

> The system serves the students who are excellent, very good, and good. However, the average students will end up on the streets, facing whatever awaits them. (Parent F)

This is a recurring impression among the parents' and teachers' accounts. None of the participants believes that the educational reforms are inclusive of students with medium-to-low academic capabilities. Teachers describe how the current system lacks the resources (time, training, and equipment) to cater to the diversity of learning needs, which would require:

> revisiting these curricula and rebuilding them to focus more on the practical aspects than the theoretical, taking into account the teaching hours available, and allocating a session for support. Stuffing the program neglects the students with the lowest comprehension, which has made a large number of students resort to private lessons that are now competing with public schools and deprived others whose families have limited income. (Teacher A)

The use of private teaching and the distinction between those who can and cannot afford it raise issues of social justice and equity. The current curriculum appears to have inadvertently reinforced social inequalities by favoring those who can supplement their education through private lessons. Over the past two decades, private tutoring has evolved into a

sector paralleling state education. This certainly was not the case from the 1960s–1980s.

> Private tutoring has burdened parents. If you speak to teachers, they say: "I am tied to a program that I must complete!" In class, there are 40 students, so private tutoring is crucial for supporting students. Average and weaker students who are not supported by additional private lessons cannot understand the program, especially the scientific subjects. (Parent D)

Parents expressed concern over the curriculum level for young children, the inefficiency of state teaching, and reliance on private lessons plus subsequent implications for families' finances and inequality. The parents' accounts also raised the issues of regulation of private lessons and ethical practice:

> [Pupils are forced] to take private lessons to fill the knowledge gaps. The disaster is that the private lessons are with the same teacher who teaches them in class. Good heavens, what a terrible situation this is! (Parent G)

Two parents explained the conflict of interest by claiming that some teachers punish pupils with lower exam marks if they attend private lessons with their competing colleagues. One teacher depicted the impact of reform and the influence of market logic on local forms of knowledge:

> Teachers used to value all their students, but for many now, teaching has turned into a consumer relationship… The logic of teaching and learning has become grounded in a "pour and dump" approach. This [sic] has forced parents to pay for extra hours, known as private lessons! [In class] the teacher now delivers information to the learners who are distinguished by excellent abilities, neglecting the weaker and average class of students. (Teacher B)

While the abovementioned "pour and dump" approach is indicative of the mechanized information-based approach to teaching, the account also raises serious ethical concerns, highlighting how guidelines around conflicts of interest and accountability are urgently needed. As an equity issue, private tutoring widens the gap between pupils who are already advantaged and those who require more support, potentially leading to

a significant disparity in educational outcomes and opportunities among learners.

The shift in the teacher–student relationship is also significant. What was once characterized by a high regard for learners and learning has evolved into a transactional seller–buyer relationship. Such a change is symptomatic of wider societal shifts toward consumerism and commodification.

Psychological and Emotional Toll

> I assume you've noticed the phenomenon of students tearing up their notebooks after exams. What does this indicate? Certainly, the pressure the student was under: They've grown to hate studying, and school has become like prison to them, sadly. There must be a change… plus any new program needs to be carefully examined to ensure a child can absorb it. (Parent D)

The perception of school as "prison" shows how some children may see the school environment as oppressive and devoid of personal freedoms rather than as a place of learning, growth, and holistic development. Teacher C was particularly concerned by the toll that external lessons take on the students:

> Learners have started viewing school as something akin to prison, with leaving coming as a huge relief. This is due to the pace of learning that leads learners to take additional lessons outside of school hours, imposing a heavy burden on them and impacting their mental and physical health… There should be a review of the program, curricula, and timing within the context of a comprehensive reform involving all specialists. Because of the overload of curricula, the learner has started to view studying as if it's a punishment being imposed on them. (Teacher C, Lower Secondary)

Perceiving education as a punishment is a strong indictment of the current educational system, suggesting that it may not address children's intrinsic learning interests and needs and that it is instead more focused on external standards and expectations. Education should ideally be viewed as an opportunity for growth and a privilege, but burnout leads to students feeling that it is instead a hated imposition. A more balanced approach that takes students' well-being into consideration is clearly needed.

Parent H was concerned about the impact of homework, particularly on projects that end up requiring excessive parental involvement because they are above the child's level:

> The first problem is the cramming in of subjects and lessons. The child has the right to play a little! I also have a problem with the projects they do at home… [T]hey increase pressure on parents because [the work is] beyond the level of the students, forcing parents to do it with them. (Parent H)

This again suggests a misalignment between the expectations the education system sets and students' capabilities. While parental involvement in a child's education is positive, it should not reach a level where parents feel like they are taking on the role of the teacher.

All the effects of these fragmented reforms described above call to mind Fullan's (2011) caution to policymakers against an overemphasis on what he termed "wrong" drivers of change (e.g., accountability measures such as test results and teacher appraisals). While these measures are important, they can also have unintended consequences if employed in isolation. Fullan (2011) rightly advocated a "whole-of-system" approach in curriculum implementation, which necessitates balancing accountability with opportunities for development. This harmonization may better lay the groundwork for sustainable educational transformation.

The Decolonization of Algerian Educational Reforms: A Holistic Approach

In 1998, the National Curriculum Committee was established to reform Algerian schooling by focusing on two aspects: curricula and textbooks. It pursued three simultaneous paths to rewrite the curricula: the 2003 programs for primary and middle education and the 2005 programs for secondary education. In October 2003, the Algerian Minister for National Education, Boubaker Benbouzid, listed the challenges facing the nation's educational system. These encompassed three primary internal factors: modernizing curricula to mirror recent institutional, economic, social, and cultural changes; enhancing the overall quality of education; and democratizing access to ensure equality. For Benbouzid, the system confronts globalization's demand for advanced competencies and the necessity to integrate languages and modern technology into the learning process to equip students for a technology-driven world. Accordingly, he

proposed a new, competency-based approach for the lower-NE system (MNE, 2003).

Since 2003, the competency-based approach has been a key idea in educational reform, guiding curricula (known as second generation), pedagogies, and assessment. Benbouzid introduced a guidebook for teachers regarding this approach authored by educational expert Xavier Roegiers (2007) under UNESCO's support program for the reform of the Algerian educational system. The minister emphasized Roegiers' expertise and the guide's potential for improving education, describing it as "a profoundly significant tool for achieving the desired effectiveness in the teacher's educational performance" (MNE, 2003, p. 7). The Francophone Algerian Minister of Education (May 5, 2014–March 31, 2019), Nouria Benghbrit, was involved in a long-standing controversy regarding the implementation of educational reforms proposed by her predecessor Benbouzid, which she had supported as a key committee member. Concerns were found about the direction of reforms for reasons including the promotion of the French language across the system, the initial inability of the minister to conduct a basic conversation in Arabic, and the engagement of French advisers in the process (Al Jazeera Media Network, 2016).

Between October and December 2014, 55 inspectors had already undergone training, with plans to accelerate the training for a further 50 inspectors by May 2015 (MNE, 2015). The aim was to equip educators with a mastery of pedagogical resources and methods, transitioning from problem-solving to integrative techniques for the final competency evaluations. The Training Directorate collaborated with UNICEF and relied heavily on European expertise, led by French Professor Bernard Rey. The program aimed to generalize the adoption of this approach by Algeria's education system, starting in primary education over a span of three years beginning in October 2014 (MNE, 2015). While neither Rey's nor Roegiers' expertise is in question, the formal privileging of external knowledge in the post-colonial Algerian context necessitates a critical reevaluation, especially when contextualizing educational reforms in light of Algeria's purported "decolonial" aims. Roegiers is not entirely dissociated from the Franco-centric perspective, and this is an issue of great sensitivity in Algeria. Alongside his academic role, Roegiers is an expert for UNESCO, UNICEF, and the *Organisation internationale de la Francophonie* (OIF), as well as Chairman of the *Bureau international de l'éducation française* (BIEF). Although international collaboration can

offer expert perspectives, the European, and specifically French, leadership guiding this reform rightly raised ideological concerns, controversy, and colonial sensitivities in the public discourse surrounding the reforms (Al Jazeera Media Network, 2016).

The languages and discourse surrounding policy can shape how stakeholders, including teachers and students, perceive, interpret, and interact with the educational system (Braun et al., 2010). Therefore, can Western-centric European experts fully grasp and address the unique cultural, socioeconomic, and educational challenges and needs of the Algerian context? Here, such reforms are noteworthily deeply rooted in an ongoing contentious national debate about defining the framework of competence within the Algerian sociopolitical historical context. Before 1962, the hegemony of French education was evident, where Islamic and Arabic-centric institutions and pedagogies were limited by colonial subjugation. Post-1962, however, a duality emerged: Francophiles valued French as a post-colonial war trophy and advocated for its continued presence in the educational system to cultivate competent global learners. Contrastingly, the proponents of Arabization championed Arabic as the national identifier, countering the colonial imprint. This divergence depicts a deep-seated polarization surrounding such reforms (Saidouni, 2021).

Educational policies are theoretical texts that, by being open to various interpretations and dependent on context, can produce very different results when put into practice (Braun et al., 2010). For example, Algeria's policy on educational democracy resonates in theory with global efforts to reduce disparities in educational access, which is a cornerstone of the UN's Sustainable Development Goals. In practice, however, teachers and parents alike mentioned an overloaded curriculum where teachers focus only on high achievers. The growth of private tuition highlights the financial burden on parents and raises questions about the equity, inclusivity, and educational democracy that these reforms claim to promote. The extent of parental involvement in children's assignments casts doubt on the alignment of educational standards with students' developmental stages. Misaligned educational expectations that turn parents into teachers risk placing undue stress on the parent–child relationship (Epstein, 2018). Finally, the top-down approach, which is already a hallmark of the Algerian educational system, risks being exacerbated by the dominant European leadership in making reform policies. These concerns raise

questions about the actual implementation of the reforms, which appear to be deviating from the objectives they initially outlined.

Conclusion

This study has been based on a limited sample of 15 participants and indicates that the implementation of the reform policy has had unintended consequences that have potentially widened educational inequalities in Algerian society. A distinct drift toward a market-driven approach has altered the educational landscape in Algeria, influencing traditional pedagogical relationships and encouraging private education's growth. What this study has also done is shown through teachers' and parents' eyes an educational policy that is struggling in practice. In this study, the parents and educators are concerned about the structure, content, lack of technology resources, overloaded curriculum, lack of equity and educators' professional development needs, and ethical issues with private tutoring. Some striking points the parents raised include students viewing school as a prison or education as a punishment, as well as the overemphasis on memorization versus critical engagement, which together suggest the rejection of a system that feels overly stressful and burdensome. While these insights must be interpreted cautiously due to the small sample size, generalizability is not the aim of this study.

The conclusion suggests a critical need for further in-depth studies to examine these preliminary warning insights. Future research should not only expand participant variety and quantity but also explore the intricate dynamics between educational reforms and the societal context. The discussed reforms under the influence of global educational agendas and European expertise might not fully account for Algeria's complex sociocultural context and colonial sensitivities. Algeria's fraught colonial history with France adds another layer of complexity; educational reforms that appear to lean toward Francophone influences can evoke painful colonial memories. This could curtail the long-term effectiveness of such initiatives in the distinct Algerian milieu. For educational adjustments to be both effective and sustainable, they should be carefully aligned with Algeria's cultural heritage, knowledge systems, and historical context while still drawing from the best international educational practices. This approach encourages the development of learners who are not only equipped to engage with global educational challenges but also who are well-rooted in their cultural identity.

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Taking into Account Linguistic Diversity in the Context of African Schools: The Difference Between Discourse and Implementation

Abdeljalil Akkari and Omar Thiam

After more than half a century of independence, African countries have yet to have found the right way to consider the cultural and linguistic diversity of their students. Curricula should value local cultures and endogenous knowledge so that learners rooted in their cultures can learn and connect to other cultures while recognizing universal values and nurturing their own local and global citizenship. This ambition involves the promotion of African languages and multilingual education through curricula. Currently, eight out of 10 children in Africa begin their schooling in a language other than their mother tongue. This is a major barrier to learning and the acquisition of knowledge and skills, as well as a key factor in the exclusion and frustration that leads learners to drop out of

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the education system. In addition to the cultural benefits, the use of one's mother tongue and local languages as a medium of instruction in education has clearly proven to be one of the most effective ways to accelerate knowledge acquisition and skills development and to improve the overall quality of learning outcomes.

In recent years, interesting experiments in educational practices have been carried out in Niger, Burkina Faso (with bilingual schools), Mali, Burundi, and Madagascar, to name but a few. They have demonstrated that not only do children who have been taught in their mother tongue achieve better results at school in subjects such as mathematics and science but also gain a better command of foreign languages.

This article is an attempt to shed light on this issue lying at the heart of contemporary African educational policies. This article first analyzes the ambiguity of the African school model, which oscillates between colonial heritage and the main tool of modernization. The second section addresses the obstacles to considering the languages and cultures of students, both at the level of the main school stakeholders (e.g., teachers, parents) as well as at the level of public education policies. The third section will present successful experiences of multilingualism in schools in certain regions of the continent, and the last section will suggest ways to rethink school education in Africa.

Some Initial Observations: The Predominance of Foreign Languages Despite Timid Experiments

First Observation: What have schools done to (1) mother tongues and (2) local languages in Africa? The schools have largely excluded these languages implicitly or explicitly from their space.

Globally, the generalization of the school format and massification of schooling, both in Northern and Southern Africa, have led to a global reduction in linguistic diversity and to a hierarchical classification of the languages, cultures, and dialects in the world.

The official languages that are predominantly used in schools as languages of instruction and schooling have gained legitimacy, visibility, and power. Some linguistic minorities that speak languages different from the official or de facto dominant languages are considered culturally distant from the school format.

In Africa, this process was further reinforced by colonization and consolidated by the first decades of independence. For fear of ethnic

or ethnolinguistic divisions and a desire to stick to the international languages (i.e., English, French, Portuguese, Spanish) that are reputed to bring modernity and openness (including in their anti-colonial and Marxist versions), many African countries chose the status quo and inertia in terms of linguistic and school policies.

Even when the Brazilian pedagogue Paulo Freire, champion of the pedagogy of emancipation, worked in the former Portuguese colonies in Africa, he mainly used Portuguese in his literacy projects, despite it being the language of colonization. The national elites, particularly in Guinea-Bissau and Cape Verde, were the ones who pushed for the adoption of this paradoxical and at the very least ambiguous pedagogical option for a pedagogy of reference for the oppressed in the world (Freire, 2014).

Second Observation: Reforming the language of instruction used in schools by transforming local languages that have been ignored and minorized for a long time into languages of instruction and schooling is difficult for many reasons, such as means (costs) and the priorities of the educational system (everything is a priority in Africa!).

In Europe, the formalization and imposition of a national language of instruction took several centuries and required the mobilization of considerable means of nation-states, such as the introduction of compulsory schooling and compulsory military service. Africa needs to move faster than this to reform its languages of instruction, all with fewer resources and more fragile and weaker states.

Making the language of instruction coincide with the mother tongue is a technically and pedagogically difficult and long process, but not an impossible one. The example of Catalonia is instructive. While Catalan had been excluded as a language from schools and institutions under the Franco dictatorship in Spain, it is now the main language of schooling and daily communication in Catalonia.

Other examples include Burundi's performance with Kirundi in the fourth year of primary school, or the interesting results in mathematics in Madagascar with the subject being taught in Malagasy in the first two years, and then in French. The bilingual schools of the *Œuvre suisse d'entraide ouvrière* (OSEO) in Burkina Faso complete their entire school curriculum in five years instead of six with significant results.

Third Observation: What is probably most limiting to changing language and school policies in the case of sub-Saharan Africa or any language context where vernacular languages are not used in schools is the lack of social or political consensus on the choice of language(s)

of instruction. For example, the vast majority of the population in the Central African Republic speaks Sango; however, it is not widely used in school.

The fracture line is not necessarily linked to ethnolinguistic, social, or regional affiliations. Some postures may even be paradoxical. For example, rural communities in Africa are not always as enthusiastic about the use of their mother tongues in school as one might think. This has been observed in the field, particularly in research in Madagascar and Niger. Even though these local communities have little daily exposure to or practice French, they want their children to be proficient in the language as early as possible.

Languages are what carry the economic, political, or symbolic power that allow themselves to be imposed as languages of instruction and schooling.

Curiously, African languages are alive and not in danger of disappearing despite their notable absence from modern institutions (schools, administrations, formal economy, mass media, Internet). They are everywhere in Africa, in families, in traditional ceremonies, in markets, in the street, and in cultural or musical productions. The desire for their entry into the school system is more related to the imperatives of teaching, learning, education, and literacy and less to threats of disappearance or identity issues. In other words, African languages and dialects are culturally and socially in the majority, but institutionally, politically, economically, and of course academically in the minority.

Learning is difficult when children enter a classroom for the first time and hear a language they have probably never encountered, do not speak at home, and have had almost no opportunity to practice outside of these contexts. According to the United Nations Educational, Scientific and Cultural Organization's (UNESCO) studies, eight out of 10 children in Africa start school in a language other than the one they speak between the ages of zero and six. In many cases, English is a language with which the teachers themselves are not very familiar; this is the reality for many teachers in rural and peri-urban areas, which makes explaining even the most basic concepts to a child difficult for these teachers (Bah, 2022).

Multiple Explanations for the Exclusion of Mother Tongues in the Context of African Schools

Currently, just over a third of children worldwide have a language of instruction other than their mother tongue (UNESCO, 2015). However, when analyzing the global context, sub-Saharan Africa is observed to have the most systematic exclusion of local and mother tongues from schools. This section attempts to provide some main explanations for this exclusion of mother tongues and local languages.

First Explanation: School and Their Format Are Always an Ambiguous Adventure in sub-Saharan Africa

We use this notion of ambiguity by borrowing it from Cheikh Hamidou Kane's novel *L'Aventure ambiguë* published in 1961. It was awarded the Grand Prix littéraire d'Afrique noire in 1962 as a semi-autobiographical novel tracing the cultural and spiritual upheaval of young Samba Diallo, the son of a *Diallobé* [knight] who'd been entrusted at the age of 7 to a very strict Qur'anic master who ensured his Muslim spiritual education. Two years later, however, his aunt, the pragmatic Grande Royale, made the difficult decision to send the children to the new school to "learn the art of winning without being right" (p. 47), even at the risk of losing their ancestral cultural values.

Schools will remain an ambiguous adventure for a long time if no African culture or language occurs in formal education. Moving from ambiguity to creolization is much more difficult but more culturally and pedagogically interesting (Glissant, 1997).

Ambiguity and tension do not necessarily mean that French or English being maintained in independent Africa is negative. As the Algerian Kateb Yacine stated at the end of the Algerian war, the French language is one of the "spoils of war." The difficulty is in how to handle this "spoil" and its effective investment in a relevant and emancipating bi- or multilingual education. The massification of access to basic education and the conditions in which this massification has been implemented (i.e., overcrowded classes, untrained teachers, limited access to pedagogical resources) make learning even more difficult for students being schooled in an unfamiliar language.

Second Explanation: A Major Effort Is Needed to Standardize African Languages

The use of a language in schools presupposes several processes: the priority of writing over speaking, the existence of a large and varied written production, the training of specialists in African languages, and standardization (e.g., grammar, spelling, adopting new words). The standardization effort is costly and only bears fruit in a delayed manner. One should also remember that the standardization effort may initially focus on the languages with several million speakers (e.g., Hausa, Wolof, Lingala, Fulfulde) in Africa rather than on languages with only a few thousand speakers. This may seem unfair, but it is pragmatic and realistic, remembering in this regard that Africa has the second highest linguistic diversity in the world after the Indian Ocean and Pacific region. Africa is characterized by a large linguistic diversity with about 1500 languages. Depending on what is considered the boundary between language and dialect, this number can easily be doubled.

Third Explanation: International Cooperation Has So Far Instead Acted to Maintain a Linguistic Status Quo by Excluding Mother Tongues and Minority Languages, Regardless of These Lines Beginning to Move

International cooperation has had a long and massive presence in Africa in the formal education sector and in development cooperation. Traditionally, it has contributed little to the consideration of mother tongues in education. International organizations such as UNESCO or the United Nations Children's Fund (UNICEF) appreciate that their official languages are used by African education systems, even if they may promote local languages occasionally. Just imagine a time when terms of reference (ToRs), policy documents, and minutes of international meetings must be in the national languages. This would inevitably have a cost but also send an important symbolic and political message.

Interesting Current Changes Despite Persistent Constraints

So far, we have described the many challenges that have prevented the use of African languages in schooling. Nevertheless, the lines and orientations are currently moving, and international cooperation is beginning to call for the consideration and valorization of mother tongues in education in Africa. We can cite the recent initiatives of the UNESCO International Bureau of Education (IBE) for the integration of national languages in curricula and would like to give two illustrations of this change:

First Illustration: The PASEC 2019[1] study conducted by *Conférence des Ministres de l'Education des Etats et gouvernements de la Francophonie* (CONFEMEN) on the academic performance of primary school students showed that Burundi has better academic performance than other countries, as measured by standardized tests. While teaching conditions (e.g., overcrowded classrooms, shortage of textbooks, inadequate teacher training, poor infrastructure) are not radically different from those in the other countries participating in the study, the inclusion of the mother tongue as the first language of instruction in primary school in Burundi is what has made the difference (CONFEMEN, 2020).

Second Illustration: According to the recent World Bank (2021) "Loud and Clear: Effective Language of Instruction Policies For Learning" report on language of instruction policies, children learn better and are more likely to stay in school when they begin in a language they use and understand. Still, an estimated 37% of students in low- and middle-income countries are forced to study in a different language, which puts them at a significant disadvantage throughout their schooling and limits their learning opportunities.

The World Bank's new approach to language of instruction is guided by five principles:

1. Provide children with instruction in their first language from the early childhood care and education stage through at least the first six years of primary school.

[1] The CONFEMEN Educational Systems Analysis Program (PASEC) has existed since 1991. It implements evaluations aimed at reporting on the performance of the educational systems of CONFEMEN member countries in sub-Saharan Africa, in the Middle East, and in Lebanon, as well as in Southeast Asia since 2011.

2. Use students' first language to teach subjects other than reading and writing.
3. When children need to acquire a second language in the primary grades, teach it as a foreign language with an initial emphasis on oral skills.
4. Continue instruction in the first language even after the second language has become the primary language of instruction.
5. Systematically plan, develop, adapt, and improve the implementation of language of instruction policies by taking into account the national context and educational goals.

In brief, the minoritization and exclusion of African languages in the school context is a complex process linked to many explanations that we have tried to summarize. We would like to add that this minoritization and exclusion has had concrete pedagogical consequences in African classrooms. We can illustrate this with a photo from a recent field trip to Niger. The use of French, a socioculturally unfamiliar language, leads to a hyper-formalization of teaching, even with academically weak primary school students (the photo was taken in a class of educational alternatives supported by international cooperation) (Fig. 1).

As Ki-Zerbo (1961) well stated over 60 years ago:

> *When we were asked at school for a commentary on the description of the beech tree by a 19th-century French author, having never seen a beech tree, we had no other resource than to hold on by memory to the same terms used by the teacher in the classroom explanation. Hence the development of a certain verbalism without substance. The Africanization of programs will place pedagogical work at its most appropriate level for the training of students, because their intelligence, their powers of observation and invention will be directly solicited. Thus, the description of the baobab would have inspired the best of us.* (Ki-Zerbo, 1961, p. 56)

The changes in the orientation of international organizations will give a new boost to the consideration of African languages in schooling. In this regard, the IBE as a UNESCO body specializing in curricular reforms has given increasing importance to the question of the local and cultural roots of curricula. In this process of accompanying countries, the linguistic issue and the development of programs in national languages will be accompanied by action research and anchored in evidence to be produced.

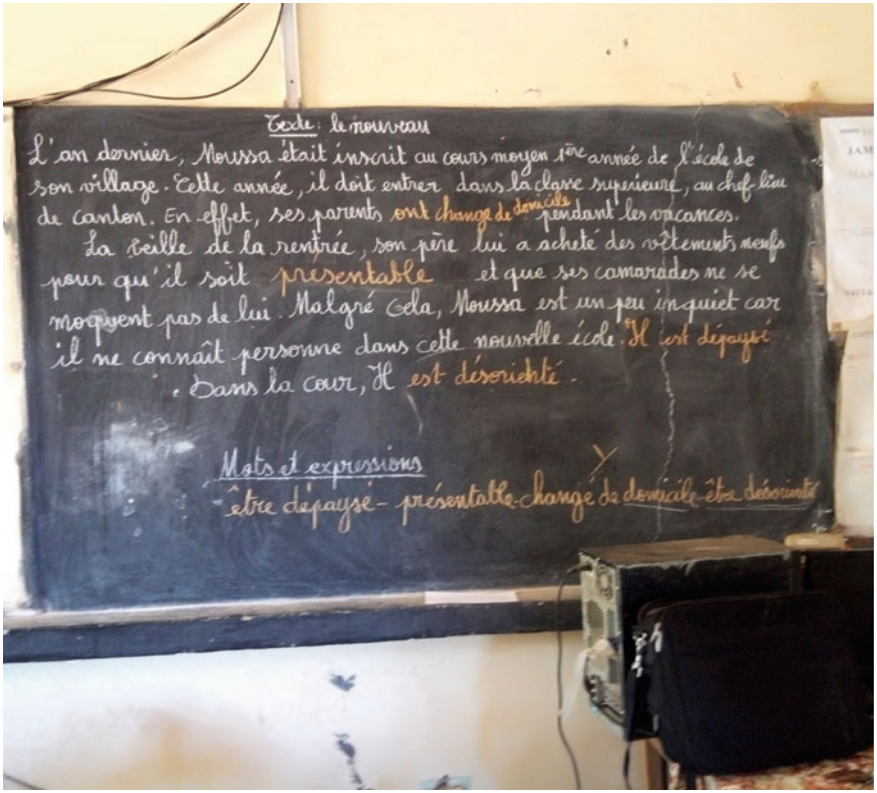

Fig. 1 A photo taken by Akkari in a Nigerian primary school classroom

The Erroneous Theses

Many erroneous theses are found about taking linguistic diversity into account in the context of African schools. The issue of promoting multilingualism continues to be a challenge with questions. However, no pedagogical, cultural, or cognitive question has been able to answer it in a scientifically convincing way so as to contradict the relevance of the integration of national languages in educational systems. We wish to expose these theses to challenge them.

Thesis 1: Bringing National Languages to School Will Cause Ethnic Conflicts!

Ethnic conflicts have long existed in Africa, as elsewhere in the world. However, to attribute a potential for aggravating ethnic tensions to the integration of mother tongues in schools and official institutions is questionable. The case of Rwanda is instructive: Linguistic cohesion did not prevent genocide.

The only violent linguistic conflict in Africa that has currently turned into an armed conflict is in Cameroon, where the dispute is between French and English, two colonial languages. English-speaking Cameroonians have long complained about the almost total domination of public life by their French-speaking compatriots. Elites from this group have allegedly used their power to marginalize the Anglophone regions when allocating resources for economic development (Orock, 2022).

The fear that recognition of linguistic diversity will lead to further ethnic conflict is consistent with the broader fantasy that multiculturalism produces communalism and racial and ethnic division. In terms of ethnic or ethnolinguistic conflict, we would like to point out here that the experiences of countries that allow minority languages to flourish in schools are often linked to the territoriality of minority languages. For example, the maintenance of French or Italian in Switzerland as a language of instruction in a predominantly German-speaking country is linked to the fact that the French- and Italian-speaking territories are well-demarcated; these two languages are in the majority in these territories and are the languages of administration, education, and political and social life. Of course, a federal system of government allows for decentralized management of schools, and tensions often arise at the language border.

In Africa, the intensive internal rural exodus and regional migrations over the decades have produced an unprecedented mixing of languages and cultures. As a result, finding a monolingual territoriality is difficult in most cities. The decentralization of education has also been poorly developed, hence the need for an inclusive language policy for minority languages.

Thesis 2: Mother-Tongue Instruction Is Currently a Luxury and Not a Priority

We often hear in the field and have even mentioned earlier in the text that the important cost of standardizing and preparing a language to leave its status as a dialect for the status of a language of instruction and writing remains significant. This thesis states that opening the debate on the language of instruction is a luxury in an African context where schools lack everything for teaching and learning, including basic infrastructure and trained teachers. Having well-equipped classrooms and trained teachers is not enough for learning if children do not understand the language used in school at the beginning of their schooling.

Thesis 3: Teaching in French or English Worked Well During the Colonial Period and the First Years of Independence

The third erroneous thesis circulating is that the non-use of mother tongues in the school context did not prevent Africans from learning during the colonial period and the early years of independence. We believe this thesis to be erroneous because it fails to take into account the massification of basic education. When schools were reserved for a select few (the elites), their social and cultural backgrounds allowed them to adapt to the ambiguous cultural adventure and to navigate easily between the traditional family cultural universe and that of the modern school. And one should not forget that the colonial school heritage only concerned 5%–10% of African children at the time. Nevertheless, when a school system becomes massive and wants to be universal, one is then confronted with other challenges. The system must reach rural and poor areas where foreign languages are practically absent. And nothing can be built in education and literacy without the mother tongue.

In Cape Verde, for example, Rosa (2010) showed the systematic prescription of Portuguese and the consequent proscription of the Cape

Verdean language throughout the school career of Cape Verdean students to have undermined their academic performance. This is a legacy of colonization that still manifests itself in classrooms today through implicit language policies.

Thesis 4: Linguistic Diversity and the Large Number of Languages Are Not Conducive to Learning

The case of Papua New Guinea, with nearly 8.9 million inhabitants and nearly 850 languages, 450 of which are used in schools, shows that having several languages of instruction can be used for successful learning. It is also a way of valuing local cultures while associating them with student learning, and this will certainly develop research on these languages.

All of these erroneous theses that have been disproved by research are circulating and influencing decision-makers. Of course, this does not mean that schooling in mother tongues will be a long, quiet river.

Important Challenges: Transitions, Time, and Learning Achievements

The thesis we have tried to defend so far is that the exclusion of mother tongues from instruction in Africa has been detrimental to the quality and relevance of school education. This is not to say that many challenges to including these languages don't exist.

The question is also found on how to transition from school levels where the mother tongue is used in instruction to levels where foreign and international languages (i.e., French, English) are used. For example, Burundi, which we mentioned earlier as a good lesson in terms of taking the mother tongue into account at the primary level, was seen to have lost its comparative advantage at the end of primary school in the PASEC study (CONFEMEN, 2020) because the students were tested in French, a foreign language that the students had not mastered.

This transition between school levels is often poorly negotiated and planned and results in the aggravation of school inequalities according to social origin. In Morocco, for example, the Arabization of primary and secondary education while maintaining French as the language of instruction in the private sector and in higher education for prestigious subjects has fueled the parents who can afford it to seek recourse in private education for primary and secondary schools.

Taking mother tongues into account in the African school context will necessarily result in bilingual and multilingual education models. These models will face another major challenge: the time devoted to learning non-language subjects in school. How can one ensure that children do not spend most of their school time on language learning?

In the Maghreb countries, for example, which succeeded in reintroducing Arabic after their independence, primary school students spend 40%–50% of their school time learning Arabic and French! How, then, can they find time for other school subjects, such as mathematics, science, history, geography, or music? This is why some in these countries have raised their voices to substitute French with English, the international language par excellence.

In a school context where more and more discussion occurs around a learning crisis recently aggravated by the COVID-19 pandemic, finding a balance between the need to take mother tongues into account and the necessary need to improve learning achievements is not easy.

Conclusion: Pragmatic and Ambitious Solutions

To conclude this paper, we want to emphasize that the status quo of excluding African languages or confining them to an eternal experimental status in the context of African schools is not an option for the future. While this status quo has prevailed for a long time, this is not to say that alternative solutions will be easy to implement or that the challenges will be easy to overcome. These future solutions must be driven by both pragmatism and ambition.

Pragmatism means taking into account the balance of power in society and not engaging in ill-prepared reforms with strong ideological overtones: The Arabization, Malagachization, and Africanization of education have left lasting damage because they were ill-prepared, poorly financed, and above all, reserved for the poorest.

Ambition means looking ahead, anticipating difficulties and foreseeable failures, and multiplying research-action. Ambition also means betting on the future of multilingual schools in Africa, betting on the local mother tongues as well as the languages inherited from colonization, in addition to the vernacular languages that are widely spoken or have a regional scope in Africa, such as Swahili or Hausa.

Relying on teachers is also essential. The importance of teachers as actors in language policy thus becomes central. What we see clearly in all

the contexts we've discussed is that teachers are under immense pressure. Responding to factors such as curriculum requirements, parental expectations, and the practical realities of managing classroom spaces that include individuals with diverse repertoires all influence how teachers implement language policy in classrooms. While we have found that different teachers take different stances toward adopting students' language repertoires, we have also found that teachers are actively engaged in language practices that disrupt the monoglossic nature of the official policy and are ultimately much more responsive to the needs of learners and communities (Reilly et al., 2022).

Ambition also means that minority languages should not be confined to the status of a transitional value toward the dominant languages at school when moving from preschool to university. We believe that this is a challenge that concerns not only Africa but all minority languages in the world. If the valorization of minority languages in the educational system stops at the primary level and is not pursued at the secondary and university levels, they will end up stagnating and going backward. The valorization of multilingualism and plurilingualism in schools is a long-term project that must be carried out from preschool to university, otherwise, it will lead to a dead end. The results in terms of improving the quality of the education system are not immediate, and the significant impacts will appear in the long term.

Furthermore, having African countries look at successful experiences on the continent and elsewhere in the world is also important. For example, countries in West Africa that are not yet engaged in reforms that generalize instruction in students' mother tongues should look to East Africa and post-apartheid South Africa, which have had a head start. Implementation will only be successful if this project is integrated into national education policy.

As a dialect language of the inhabitants of the East African coasts and then as a creolized and standardized language used in schools in both Kenya and Tanzania, Swahili constitutes an interesting laboratory for the whole of Africa. Edouard Glissant (1997) defined creolization as the encounter, interference, clash, harmonies, and disharmonies between cultures in the realized totality of the world-earth.

The implementation of bilingual education in Africa will allow for the articulation of:

1. Appeased identities: mother tongues, first languages, and traditional and religious values, and
2. Modernity: widely spoken vernacular languages and international languages inherited from colonization.

Finally, one element remains that we have not been able to develop in this text, and that is the importance of valuing both linguistic and cultural diversity. If Africa remains within a school framework that considers linguistic and cultural diversity to be a disruptive factor or even a handicap in teaching and learning, then it cannot undertake linguistic and educational policies or structural changes that will benefit all students. However, if Africa engages in intercultural approaches to education, its linguistic and cultural diversity will become a social and pedagogical added value for more justice and equity in education (Akkari & Radhouane, 2022).

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Education Reforms in Kazakhstan: International Integration and Nationalization Efforts

Seffat Duman

Introduction

International economic and cultural interactions have been increasing in the globalizing world. The field of education and training has also been affected by these developments, with local and national practices becoming increasingly internationalized. This transformation brings many benefits, with the effects on the infrastructure of the education system being among the most important of these. The infrastructure of Kazakhstan's education system began to change from its Soviet-era infrastructure in the 1990s when it was opened up to international integration, providing free education for all children, having qualified teachers, and being open to scientific development with a large number of research institutes being the prominent elements of this infrastructure (Yakavets, 2014, p. 1).

In 2014, a study conducted in collaboration with Nazarbayev University and the University of Cambridge examined the process of educational reform in Kazakhstan, which had declared its independence in 1991.

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In addition to examining official documents from this period, teacher and student interviews were also conducted within the scope of the research, which accordingly determined international integration to have had many benefits for Kazakhstan's education system in the form of making legal arrangements related to education, organizing institutions related to education, organizing various programs related to education, harmonizing the education curriculum with national values and international standards, and improving the quality of education and training institutions (Bridges, 2014).

In general, the goal of reforms in the education system has been economic development and a world-class quality education. However, understanding that the educational policies and practices in Kazakhstan, as in every country, have been shaped by its society's past experiences, history, culture, and traditions is equally important. While Kazakhstan has attempted to bring its education system up to international standards, some of the features of the Soviet Union have been preserved, such as the continued influence of the centralized approach in the education system. However, various innovations have been made to improve the quality of the education system and bring it in line with international standards. For example, while the education system aims to create a national culture and increase the use of the Kazakh language, importance has also been given to increasing the use of the English language in addition to Russian as a requirement of international integration.

In addition to creating and preserving its national culture, Kazakhstan has aimed to reach international standards in all areas, from economics to social and educational issues. To this end, Kazakhstan has signed and participated in many protocols related to education and to human and children's rights. These include the Universal Declaration of Human Rights; the Convention on the Rights of the Child; the International Covenant on Economic, Social and Cultural Rights; the Lisbon Convention on the Recognition of Higher Education Related Qualifications in the European Region; and the Bologna Declaration. Together with all these efforts, Kazakhstan has identified the training and development of human resources at international standards as one of the priorities of its 2020 Strategic Development Plan.

This study investigates how international integration has impacted Kazakhstan's education system in both quantitative and qualitative aspects. Of these two dimensions, the quantitative dimension includes the material dimension of the education system in Kazakhstan, as well

as its institutions, schools, laws regulating the education system, and the programs and methods that have been implemented. Meanwhile, the qualitative dimension involves the content of the education system, how the quality of its content have been improved, and what factors affecting the content have been prepared. Therefore, examining the effects of international integration in education on the Kazakhstan education system has been deemed appropriate under two main headings: the effects of integration on the organizational structure and the scope of education.

The Effects of International Integration on Organizational Structure

Like all states that declared independence after the collapse of the Soviet Union, Kazakhstan faced the difficult task of building its own economic order. The lack of any previous experience with democracy coupled with administrative difficulties made its reconstruction even more difficult. Therefore, great economic challenges and significant shortcomings existed in Kazakhstan's education and training reforms in the 20 years after its independence, especially in the first 10 years. Many materials that were needed in schools could not be supplied, qualified teachers had gone abroad due to the delayed payment of their already low salaries, and some of the children did not even have access to education or training opportunities. Because the education system that had been maintained under a certain order and system during the Soviet period had disappeared, building a new education system had become necessary, and due to significant economic difficulties, Kazakhstan's education system deteriorated significantly during these years (Yakavets, 2014, pp. 4–5).

The 1992 Law on Education established the Ministry of Education (later renamed *Bilim Jäne Ġılım Ministrligi* [Ministry of Education and Science]) as the executive center of the education system. The Ministry was tasked with preparing draft education budgets, determining curricula, providing the necessary training for educators, representing the education system internationally, and inspecting educational institutions. The 1995 Constitution of the Republic of Kazakhstan regulated the scope of education. First of all, it recognized every child in Kazakhstan to have the right to a free education. The decisions were also made that no discrimination would occur on issues such as religion, language, ethnicity, or gender and that everyone would have equal rights through inclusive

education (Yakavets, 2014, pp. 7–9). In the context of the international integration of Kazakhstan's education system through the inclusive education approach, international conventions and agreements have been harmonized and appropriate national laws have been adopted. The adoption of the inclusive education approach organized the infrastructure of the education system to include every child, including the disabled and prepared the infrastructure that children in need of special support required, such as psychological support. Infrastructures such as school toilets were harmonized with the required hygiene standards, and teachers and other personnel working in schools were trained (Rollan, 2021, p. 9).

However, the implementation of the legal arrangements and the necessary organization were not easily realized. The Ministry's managers had not experienced the basic features of democratic order in the Soviet era, such as efficiency, accountability, and free market conditions. In addition, the high level of financial inadequacies had resulted in a lack of successful performance, which led to a high turnover of personnel including the Minister, which worsened the already low performance due to policy changes. Due to financial difficulties, 303 kindergartens were closed in 1993, and the number of secondary schools was also reduced. Due to the state's legal incentives and the emergent need, the process of private education institutions began (Bolatova, 2019, p. 51). Due to economic inadequacies, the budget allocated for the education system in Kazakhstan had been compulsorily reduced. While the proportion of the gross domestic product (GDP) allocated to education was 4% in 1995, this rate decreased to 3.3% in 2000 (Fig. 1).

After the 2000s, various reforms in the education system and international integration efforts were aimed at increasing the quality and quantity of education. Despite these efforts and due to economic inadequacies, the education system received the lowest budget allocation of 2.3% of GDP in 2005. As can be seen in Fig. 1, no significant increase occurred in Kazakhstan's budgetary allocation to the education system in the following years. In fact, compared to other countries with similar incomes, Kazakhstan allocates relatively lower resources to the education system. This inadequate allocation of resources to the education system has led to low teacher salaries, overcrowded urban schools, and inadequate equipment. In order to fully achieve the goals set out in legislation and in strategic documents, a gradual increase in public spending has become necessary (Pons et al., 2015, p. 3).

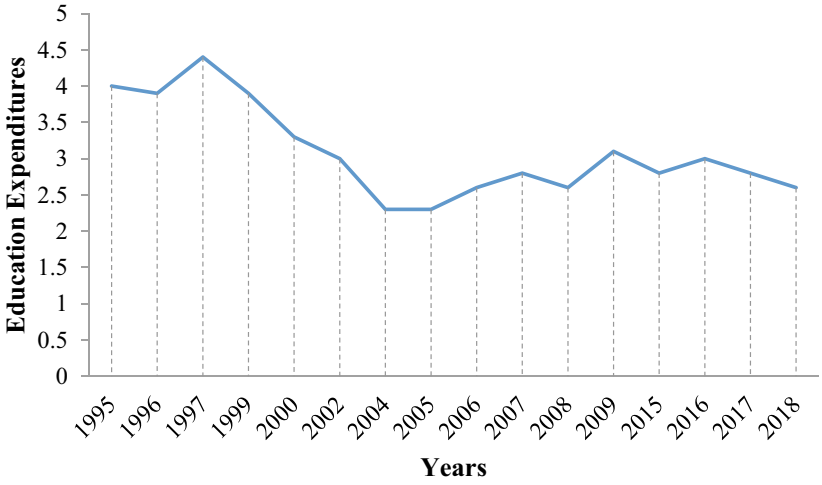

Fig. 1 Government expenditures on education (No data available for years not shown in the figure; World Bank Database Education Statistics, 2024)

The Kazakhstan Education Strategy 2011–2020 defined the strategy of teacher education reform. The main objective of the Teacher Education Reform program has been to ensure the professional development of teachers in public schools so that students in schools can be educated as students with the international qualifications of the twenty-first century. In order for teachers to be qualified at international standards, 3-month training has been provided through Centers of Excellence in accordance with the continuous in-service training approach (Wilson et al., 2013, p. 1).

International integration has also had an impact on the general management and internal administration of schools in Kazakhstan's education system. First of all, schools are affiliated with the Ministry of Education and Science and operate under the management and control of the Ministry. Importance is had in having the teachers and administrators who work in schools be qualified according to international standards and the administrators be appointed in accordance with objective criteria. As in many developed countries, this is done by selecting school principals

from among teachers who have a certain number of years of experience and who have been successful based on certain performance criteria (Yakavets, 2016, p. 686).

Kazakhstan has decided that it needs to build a good education system infrastructure for economic growth and has set the following organizational goals in education in the 2011–2020 Education Strategy in order to achieve this (Ministry of Education and Science, 2010, pp. 2–3):

- Improving the inclusive education system in schools,
- Ensuring that all students have equal access to the best educational resources and technologies,
- Full inclusion of children in pre-primary education and training,
- Developing new mechanisms for financing education to increase the availability of quality education,
- Training highly qualified personnel for the education sector,
- Increasing government support and incentivizing the teacher workforce,
- Improving education governance, including the implementation of corporate governance principles,
- Developing a public–private partnership system in education,
- Improving the system for monitoring educational development, including the production of national education statistics in line with international standards,
- Ensuring automation of the training process,
- Expanding the network of preschool organizations,
- Solving the problems of unrated schools,
- Developing a personnel training infrastructure for economic sectors,
- Increasing the prestige of technical and vocational education,
- Providing the appropriate infrastructure and organization for lifelong education.

Kazakhstan has wanted to bring education and training in line with international standards. In this context, the duration of compulsory primary and secondary education was increased from 10 to 12 years. The duration of pre-university education and training is 1 year of compulsory preschool education and training, 4 years of compulsory primary education, 5 years of compulsory basic secondary education, and 2 years of general or technical-vocational secondary education (high school;

Yakavets, 2014, pp. 7–9). The main motivation for this change is the 12-year compulsory primary and secondary education most developed countries have. Kazakhstan made this policy change in order to move to the same quality of education as these countries, thus ensuring that its students receive internationally recognized education and training. The stages of pre-university education, the number of years each stage lasts, and the age at which children enter each stage are shown in Fig. 2.

In Kazakhstan, schools are affiliated with the Ministry of Education and Science, and the Ministry provides leadership with regard to making the necessary controls in the context of the education system's ideal organizational structure, providing a standard of education in accordance with international science, and determining policies for all Kazakh children and young people. Therefore, the Ministry has been organized in accordance with these objectives, and the Committee on Secondary Education, the Committee on Quality Assurance in the Field of Education, and the Committee for the Protection of Children's Rights have been established within the Ministry. The services this structure provides are summarized as follows:

- Organizing the enrollment of preschool children (up to 6 years of age) in preschool education institutions,
- Organizing student enrollment in primary and secondary education institutions,
- Organizing external studies on basic secondary education and general secondary education institutions,
- Organizing the provision of pedagogical support to children in educational institutions,
- Organizing the awarding of post-training diplomas,
- Competitively appointing heads of state secondary education institutions based on certain criteria,
- Organizing in-service trainings for teachers
- Granting the license required for undergraduate and postgraduate studies,
- Establishing guardianship or custody for children without parents,
- Assigning allowances to guardians or caregivers for the care of children without parents.

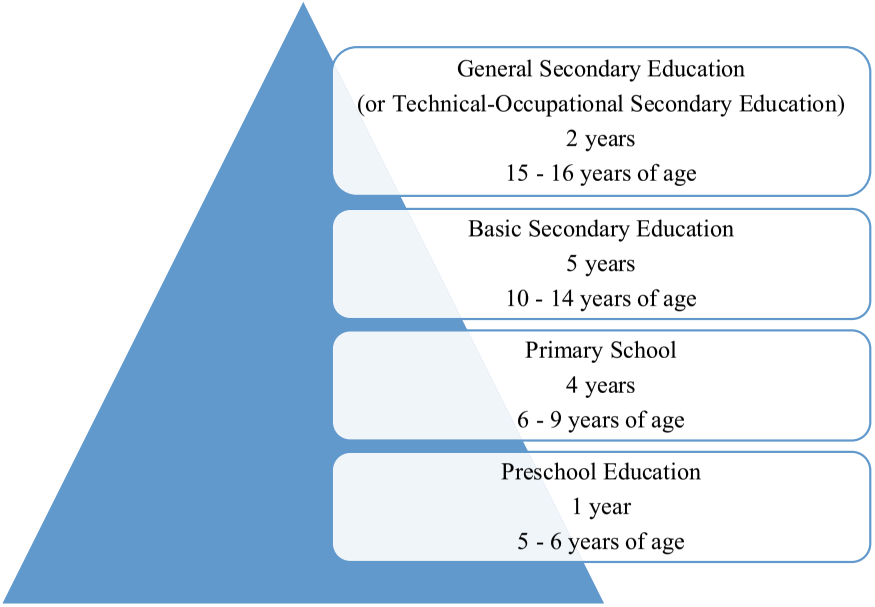

Fig. 2 Stages of Kazakhstan's pre-university education system (Independent Agency for Quality Assurance in Education, 2024a)

Table 1 Primary, basic secondary, and general secondary education class hours

Primary education		*Basic secondary education*		*General secondary education*	
Classroom	*Lesson hours*	*Classroom*	*Lesson hours*	*Classroom*	*Lesson hours*
1	24	5	32	10	39
2	25	6	33	11	39
3	29	7	34		
4	29	8	36		
		9	38		

According to Kazakhstan legislation, Article 56 of the Law of the Republic of Kazakhstan dated July 27, 2007 "On Education" sets out in detail the standards for compulsory primary and secondary education. The standards mostly specify details about the content of education, which is examined in detail under the following sub-sections. The maximum weekly teaching hours for each grade level are also determined in accordance with this law, with Table 1 providing the course hours for primary, basic secondary, and general secondary education (Ministry of Education and Science, 2010, pp. 35–39).

As mentioned above, pre-university education and training in Kazakhstan consists of preschool education, primary, and secondary education. These three education and training institutions have been formed as a result of Kazakhstan's international integration and are analyzed in the following sub-sections.

Preschool Education

During the Soviet period, education and training was given importance in Kazakhstan as in other Turkic Republics, and various education and training institutions were opened at a certain level, with education and training being carried out at a certain level of quality and order provided that it was in accordance with the Soviet ideology. Between 1960 and 1990, various studies were carried out to remedy the missing educational institutions as well as the instructors needed in preschool education. For example, education faculties were opened in universities, and highly educated specialists were trained. These efforts paid off, with

the percentage of children aged 3–6 receiving preschool education in Kazakhstan having reached 47.8% by 1990 (Zhumasheva, 2018, p. 27).

Preschool education was also emphasized in the post-independence period, but education and training opportunities deteriorated in the first years after independence due to economic difficulties, especially in rural areas. In the first decade after independence, a 65% decrease occurred in preschool education institutions due to financial constraints. The closure of preschool education institutions naturally led to a decrease in the number of children benefiting from preschool education (Bolatova, 2019, p. 55).

In order to find a solution to this situation, Kazakhstan first made the necessary legal arrangements. Through the Law on Education, Kazakhstan adopted the Law on the Compulsory Preparation of Children for Pre-School Education on June 7, 1999. For the first time among the independent republics, Kazakhstan had adopted a compulsory preschool education. This shows that Kazakhstan had identified preschool education as a priority area in its education system. After the adoption of this law, one-year preschool education classes started to be opened in schools. After the 2000s, preschool education opportunities in Kazakhstan increased rapidly. Table 2 shows the increase in the percentage of children aged 3–6 receiving preschool education in Kazakhstan over the years. Gross enrollment ratio—the number of students enrolled at a given educational level, regardless of age, expressed as a percentage of the official school-age population at the same educational level.

Preschool education Kazakhstan occurs between the ages of 1–6 and is planned in three stages according to the age of the children. Various objectives are set for each age group, and arrangements are made accordingly (Yıldırım & Buluç, 2022, p. 248):

- The First Step Program for those 1–3 years of age aims to teach basic communication skills and motor movements.
- The Smart Child Program for those 3–5 years of age aims to contribute to the children's physical and social development. The importance of preschool education is considered important first for developing the country and secondly for developing children's personalities. Therefore, the program aims to contribute to the personality formation of children through preschool education, aiming in this context to develop such aspects as healthy physical

Table 2 Enrollment rate for preschool education for ages 3–6

Year	*Resident population total at the end of the year, persons*	*Enrollment, all levels, persons*	*Enrollment rate (%)*
2012	1,292,220	872,210	67.5
2013	1,363,992	932,810	68.4
2014	1,423,169	1,040,877	73.1
2015	1,450,435	1,070,686	73.8
2016	1,480,700	1,271,268	85.9
2017	1,512,045	1,214,347	80.3
2018	1,524,752	1,190,662	78.1
2019	1,558,029	1,487,072	95.4
2020	1,563,115	1,287,091	82.3
2021	1,562,573	1,305,100	83.5
2022	1,575,885	1,391,251	88.3

Source Independent Agency for Quality Assurance in Education, 2024b

development and improved healthy social communication skills, as well as to transfer a certain level of information.

- The We Go to School Program for those 5–6 years of age: In order to raise the quality of education to international standards, the decision was made that children should be prepared for the school process. Thus, preschool education in Kazakhstan is closely linked to the national development strategy. The program aims to promote children's healthy personal development, increase their language and communication skills, and develop their knowledge and creativity in areas ranging from mathematics to art.

In addition to these programs, additional methods suitable for international integration have been used for the preschool education system in Kazakhstan. The Maria Montessori method is used to apply pedagogical methods suitable for children's individual development. The mental arithmetic method is used to provide children with mental development by making arithmetic calculations with a virtual abacus they create in their minds. The Waldorf pedagogy method is used to teach children pieces of information appropriate to the child's age instead of teaching traditional knowledge. Also, the Zaitsev method is used to teach sounds and objects with specially produced cubes (Bolatova, 2019, pp. 60–61).

In the post-independence period, Kazakhstan has attached importance to preschool education in order to raise its education to international standards and has implemented programs and methods in accordance with international standards for the personal, social, and cultural development of children in the preschool period in order to provide education in accordance with the national culture and language and to remove the language and cultural influence of Russia. In this way, Kazakhstan has aimed to provide the best personal development for children and to ensure that they have a good profession in the future and that they contribute to the country's economic development.

Primary Education

Primary education in Kazakhstan covers a compulsory education and training period lasting a total of 4 years, starting when children are 6–7 years old. Aiming for international integration in education, Kazakhstan has determined the main objectives of primary education and the content of education and training activities in accordance with international norms. Accordingly, the objectives of primary education in Kazakhstan are:

- Teaching material and spiritual human values,
- Teaching basic information about nature and society,
- Having students gain the competencies of reading, writing, counting, self-expression, and perceiving cause-and-effect relationships,
- Ensuring the initial formation of the skills of finding the information needed and for analyzing and interpreting the information that is found (Zhumasheva, 2018, p. 31).

Article 56 of the Republic of Kazakhstan's Law on Education sets out in detail the standards of compulsory primary education. These standards can be summarized as follows. Accordingly, importance is attached to ensuring integrity and continuity in the education system. In the context of this continuity, the use of knowledge obtained from education and training should also be ensured in practical life. The objectives of the education system should be taken into account for all decisions to be taken. The main objective of the education system is to increase the

Table 3 Primary education enrollment rate for children between 7 and 10 years of age

Year	*Resident population total at the end of the year, persons*	*Enrollment, all levels, persons*	*Enrollment rate (%)*
2012	1,015,688	1,021,870	100.6
2013	1,071,243	1,083,823	101.2
2014	1,130,655	1,143,008	101.1
2015	1,208,689	1,218,481	100.8
2016	1,286,025	1,311,708	102
2017	1,355,192	1,371,300	101.2
2018	1,383,926	1,416,854	102.4
2019	1,438,370	1,800,664	125.2
2020	1,469,266	1,465,862	99.8
2021	1,500,850	1,495,533	99.6
2022	1,546,447	1,522,810	98.5

Source Independent Agency for Quality Assurance in Education, 2024b

quality of education. In this context, raising individuals who are loyal to their homeland, open to development and innovation, integrated with the world, and know the Kazakh, Russian, and English languages is important. Critical to the realization of these goals is measuring and evaluating the performance of each stage of the education and training system using predetermined objective criteria (Legal Information System of Regulatory Legal Acts of the Republic of Kazakhstan).

Primary education in Kazakhstan has continued being as widespread as it had been during the Soviet Russian era. Table 3 shows the percentage of children between the ages of 7–10 attending primary education in Kazakhstan by year. Gross enrollment ratio—the number of students enrolled at a given educational level, regardless of age, expressed as a percentage of the official school-age population at the same educational level.

Secondary Education

Secondary education in Kazakhstan consists of basic secondary education and general secondary education (or technical/vocational secondary education). Basic secondary education is a compulsory education and training period lasting a total of 5 years, which children attend between the ages of 10–14. General secondary education is a compulsory 2-year

period of education and training that children attend between the ages of 15–16. General secondary education can also take the form of technical or vocational secondary education (profile school).

In order to meet Kazakhstan's own needs and provide a high level of general secondary education in line with international standards, the country has created schools with different structures. For example, schools have time differences in the form of evening and day schools, as well as general secondary schools that differ in terms of content. Kazakhstan's general secondary school types can be grouped as follows (Zhumasheva, 2018, p. 33):

- Comprehensive school: Implements the standard program of primary, secondary, and general secondary education as defined by law.
- Small school: A program that combines classes with too few students.
- Gymnasia: Implements the standard primary, secondary, and general secondary education program as defined by law, plus additional programs such as social sciences according to students' abilities.
- High school: Implements the standard secondary and general secondary education program as defined by law in a more in-depth manner.
- Technical or vocational secondary education (profile school): Implements the standard general secondary education program as defined by law in the form of an advanced vocational specialization program.

Article 56 of the Republic of Kazakhstan's Law on Education sets out in detail the standards for compulsory secondary education. All stages of the education and training system should be structured in a coherent and continuous manner in accordance with the country's economic, social, and cultural development and nationalization goals. Educational and training materials should be renewed accordingly, the content of these materials should be as relevant as possible to practical life, and these opportunities should be provided to all individuals of the country with equal opportunities. Having students learn Kazakh, Russian, and, for international integration, English is essential. The inclusion of local languages should also be allowed in education.

In order to achieve these goals, educators are to be continuously developed within the scope of lifelong learning programs. In addition, the

results of education and training activities will be measured by objective criteria at every stage. For example, students' foreign language skills will be tested using internationally recognized exams. In conclusion, importance is attached to the realization of national and cultural values alongside international integration, thus ensuring that individuals will be raised who are innovative and open to development (Legal Information System of Regulatory Legal Acts of the Republic of Kazakhstan, 2023). Basic secondary education in Kazakhstan has broadly continued its activities as had occurred during the Soviet Russian period. Table 4 shows the ratio of children between the ages of 11–15 attending basic secondary education in Kazakhstan by years. Gross enrollment ratio—the number of students enrolled at a given educational level, regardless of age, expressed as a percentage of the official school-age population at the same educational level.

General secondary education in Kazakhstan continues to operate at a high level. Table 5 shows the percentage of children between the ages of 16–17 attending general secondary education in Kazakhstan by years. Gross enrollment ratio—the number of students enrolled at a given educational level, regardless of age, expressed as a percentage of the official school-age population at the same educational level.

Table 4 Enrollment rate of 11–15 year olds in secondary education

Year	*Resident population total at the end of the year, persons*	*Enrollment, all levels, persons*	*Enrollment rate (%)*
2012	1,114,537	1,124,313	100.9
2013	1,121,296	1,126,977	100.5
2014	1,141,085	1,089,742	95.5
2015	1,188,142	1,165,386	98.1
2016	1,231,522	1,197,380	97.2
2017	1,296,121	1,326,710	102.4
2018	1,330,782	1,377,218	103.5
2019	1,462,149	1,503,152	102.8
2020	1,542,087	1,586,850	102.9
2021	1,629,323	1,667,680	102.3
2022	1,773,918	1,734,271	97.8

Source Independent Agency for Quality Assurance in Education, 2024b

Table 5 Secondary education enrollment rate for 16–17 year olds

Year	*Resident population total at the end of the year, persons*	*Enrollment, all levels, persons*	*Enrollment rate (%)*
2012	501,925	450,384	89.7
2013	468,708	421,039	89.8
2014	449,164	393,998	87.7
2015	441,100	394,253	89.4
2016	440,315	379,353	86.1
2017	443,532	391,714	88.3
2018	447,388	387,790	86.7
2019	473,381	403,333	85.2
2020	506,057	438,754	86.7
2021	529,520	458,055	86.5
2022	575,741	484,394	84.1

Source Independent Agency for Quality Assurance in Education, 2024b

The Effects of International Integration on the Scope of Education

During the Soviet era, the content of primary and secondary education in Kazakhstan was shaped in accordance with the state philosophy. For example, all students were given a uniform science and mathematics education, with the aim being to blend the Marxist-Leninist ideology with a uniform education and thus to impose and teach the philosophy of the state to students alongside the humanities and social sciences. The reason for applying this approach was the idea that the humanities and social sciences can only be taught correctly when they are taught alongside the philosophy of the state.

Another important issue that draws attention in terms of the content of education during this period is that education and training were rote memorization-oriented. Students were asked to learn what was explained in the books, questions were asked according to what was written in their books, and comments were not asked. Thus, students learned what was written in books as the only truth and answered the questions on the exams accordingly, thus memorizing the philosophy of the state (Yakavets, 2014, pp. 1–2).

In 1991 when Kazakhstan gained its independence, it also inherited this approach to education that had been established during the Soviet era. In order to be successful in the international arena, Kazakhstan

needed both to raise the quality of the content of education to international standards and to nationalize the content of education in accordance with its own cultural and social values. Determining the new curriculum, preparing new textbooks, and printing them in sufficient numbers for nationalizing an education system infrastructure that had been created during the Soviet period could not be easily handled. In addition, teachers' salaries remained extremely low in Kazakhstan, which also suffered from financial constraints. At the same time, these teachers had to be trained according to the new curriculum and course content. This was not an easy situation to overcome in an environment of financial inadequacies. For this reason, these targeted efforts could be realized neither easily nor quickly, with progress only able to be made gradually through many programs spread over many years (Kaplankıran, 2017, p. 41).

Raising the Quality of Educational Content to International Standards

Kazakhstan wants to rebuild its education system which had been destroyed after independence in accordance with international standards and has implemented various programs for this purpose. In 1993, the Bolashak International Scholarship Program provided successful students with the opportunity to study abroad with all expenses covered. The only condition of the scholarship was to return to Kazakhstan for at least five years of work upon graduation. The scholarship program aims to ensure that many Kazakh students receive education at international standards and to provide the qualified personnel the country needs. For the first time, 187 students from Kazakhstan were sent to study in the USA, England, Germany, and France in 1994. The scope of the program and the number of students who were awarded scholarships continued to increase in the years that followed. Today, many students who have received international education and graduated with Bolashak scholarships are successfully working in state institutions and companies in the country. In the period 1994–2020, 14,156 scholarships were awarded through the Bolashak program. Of these, 785 were allocated between 1994 and 2004 and 13,371 between 2005 and 2020. The distribution of Bolashak scholarship winners is listed by a foreign country as follows (Akhmet Yassavi University, 2021):

- UK and Ireland (45.5%)

- USA and Canada (26%)
- European countries (12.9%)
- Asian countries (8%)
- Russia (7.6%)

In conclusion, the Bolashak program has made a significant contribution to raising education in Kazakhstan to international standards. The Bolashak program has brought a major breakthrough and innovation to Kazakhstan's internationally integrated society. The number of young people wishing to study abroad has increased, resulting in a growing number of Kazakh citizens with the highest level of education and training. The demand for learning English and the number of English speakers has also grown. The success of the Bolashak program has also been recognized by the country's top leadership and broadened their horizons. This is important because modernizing education in Kazakhstan and bringing it up to international standards was made possible primarily because the country's top officials understand the importance of human capital development.

With this awareness, the legal and structural reforms have continued and programs such as the State Education Development Program for 2005–2010, the State Technical and Vocational Education Development Program for 2008–2012, the Kazakhstan Children Program for 2007–2011, and the Balapan Preschool Education Program for 2010–2014 have been implemented. In order to ensure access to quality education and develop human capital in order to achieve the economic growth Kazakhstan needs, the main objectives related to the scope and content of education in the 2011–2020 Education Strategy are listed as follows (Ministry of Education and Science, 2010, pp. 2–3):

- Updating the content of preschool education and training,
- Raising mentally, physically, and spiritually developed competitive human capital in educational institutions,
- Modernizing the technical and vocational education system in line with the demands of society and integrating the system into the international education field,
- Meeting the needs of the labor market and the country's industrial development goals,
- Ensuring lifelong education,

- Developing social responsibility, patriotism, high morality, and leadership skills in students,
- Transitioning to the 12-year education model and updating the educational content,
- Updating the structure of the technical and vocational educational content according to the demands of the country's industrial and innovative development.

The goal of education and training at international standards targets in place of the Soviet-style education an education scope that gives importance to individuality, emphasizes diversification in education and training, and offers students the opportunity to choose a profession and progress flexibly. In addition to this, the aims have been to improve the quality of education and training by involving students more in education and training and to bring measurement and evaluation in line with Western standards.

The Prime Minister's Office of Kazakhstan has identified the achievements made until 2020 and the work to be done in the future in the context of updating the curriculum and bringing it to international standards in the education system by 2025. In the context of the achievements, curriculum updates are emphasized to have been successfully implemented at the level of 90–100% and the free education system to have been implemented in a way to provide everyone with a profession. The main goals to be achieved by 2025 have been defined as follows (Prime Minister of the Republic of Kazakhstan, 2019):

- Increase the level of international integration of Kazakhstan's education system to reach a globally competitive level,
- Educate and train students on the basis of universal values,
- Increase science's contribution to the national economy.

The steps that are planned to be implemented in order to realize these goals have also been determined. First of all, the quality of teachers will be improved. In order to achieve this, teachers' salaries will first be raised to twice their current salary within 4 years. The next step will be to design and modernize a new teacher training system to improve the quality of teachers. Curriculum updates will continue and be completed at 100%. Improvements will also be made to school logistics. Camera

surveillance and safe transportation will be provided. Awareness will be raised regarding cyber security. Efforts will be made to prevent bullying and suicide. More effective communication between schools and parents will be ensured, and efficiency will be increased regarding values-based education practices. More emphasis will be placed on sports activities. Another important effort will be to reduce the difference in the quality of education between urban and rural schools. To this end, rural schools will be provided with qualified pedagogical staff, the fee system will be changed, and rural schools will be fully supplied with teaching materials, computer hardware, and digital equipment. The construction of 114 new boarding schools in rural areas will be ensured, and physics, chemistry, and biology classrooms will be computerized. Additional resources will also be allocated from the state budget for these purposes.

Nationalization of Education

The policies Russia had implemented during the pre-independence period affected Kazakhstan's education system. In this period, Russia intensively processed its own history and culture into the education system in order to strengthen its power. It tried to shape all Turkic republics in line with its national policies, gave special importance to the education system in order to realize this, and opened Russian schools in line with this. An education system indexed to Russian policies was established in these schools through the textbooks it prepared. During the Russian period, Marxist ideology was implemented in the education system, and religious and cultural lessons were shaped accordingly. Leaders such as Lenin and Stalin were praised, and many works of Russian literature were adapted and rewritten in accordance with political views and read to all students.

Russia not only focused on its own religious, cultural, and historical values but also designed the content of the educational system that was indexed to its own ideological policies even in the field of science. While implementing all these policies, efforts were made to bring the education system as high a level of quality as possible, to give freedom to women, and to ensure that the whole population had access to educational rights. Thus, the aim had been to establish the education system successfully. Indeed, this was achieved to a certain extent. This success was even felt in the post-independence period. Thus, when Kazakhstan declared its independence from Russia, it inherited a certain level of education system infrastructure, but this inheritance was a legacy that had moved away

from its national values. Therefore, Kazakhstan not only modernized its education system but also adopted the goal of nationalization (Yıldırım & Buluç, 2022, p. 245).

More than half of the stakeholders in the field of education and training supported the work carried out within the scope of the goal of education and training at international standards. However, the fact that some stakeholders did not support the reforms and criticized them in various ways due to setbacks led to the continuation of the influence of the Soviet curriculum scope and caused setbacks in some reforms (Kalikova & Silova, 2008, pp. 143–147). However, one important component of the reforms that are aimed at bringing education and training up to international standards is the nationalized design of education and training in place of the Soviet-influenced approach to education and training. In fact, the decision was made that Kazakhstan as an independent state needed to build its own national culture.

The Russian language had been the language used in education and training in all affiliated republics during the Soviet period, including Kazakhstan. The aim of the Russian administration regarding this policy was to ensure that the Russian state and its dependent states established ties and bonded together over a common language. Indeed, the scientific and cultural values of local languages were not recognized during this period. The Russian language managed to become a common denominator for states of different ethnic origins both in education and training and in social life (Yakavets, 2014, pp. 1–2).

Some of the concepts used during the Soviet era continue to have an impact even today. For example, the Russian language differentiates between Turks in Türkiye and Turks under Russian rule, with the former being called *Turok* and the latter *Tyurskih narodov* (i.e., Turkic peoples). This distinction continues in Kazakhstan's education system. Another example is that in order to protect communism during the Soviet period, the concept of nationalism was treated as a negative concept in the education system along the lines of racism. Today, the word *ultshildyk*, which is used in the Kazakhstan education system to mean nationalism, also has the negative meaning of racism (Zhumasheva, 2018, p. 23).

The influence of the Soviet era still persists in the Kazakh language, and for this reason, efforts are being made to nationalize the education system in Kazakhstan. As of 1996, the decision was made to design new textbooks. Between 1997 and 2000, decisions were made to ensure the transition from Russian to Kazakh as the language of education and

to nationalize the content of social sciences courses, especially history courses (Yakavets, 2014, pp. 7–9).

While rewriting Kazakh history, the aim was to change and nationalize written history in accordance with Russian policies. While doing this, however, the common history of Russia and Kazakh society has not been rejected, because Kazakhstan does not consist of a pure Kazakh society. According to official statistics, Kazakhstan is 70.7% Kazakh, 15.2% Russian, 3.3% Uzbek, 1.9% Ukrainian, 1.5% Uyghur, 1.1% Tatar, and 1.1% German (National Bureau of Statistics, 2023). In other words, Kazakhstan is a multinational country and the homeland of many people of different ethnic backgrounds, especially Russians. Therefore, the rights of the citizens of these different ethnic backgrounds need to be protected, and these people need to unite over a common ground. World War II in particular involved a common history for Kazakhstan and Russia and has the ability to unite these peoples. For this reason, the chapters on World War II can be exemplified as not having been changed much in the history curriculum (Zhumasheva, 2018, p. 23).

Kazakhstan has paid special attention to the development of the Kazakh language in the context of the expansion of national culture. In 1997, the Law on Languages emphasized the active use of the Kazakh language in all state institutions, and the decision was made to carry out studies and implement the programs needed to spread the Kazakh language in the education system. As a result of the implemented policies, the number of schools providing education only in Kazakh or mixed languages has gradually increased, while the number of schools providing education only in Russian has gradually decreased (Bolatova, 2019, p. 52).

Kazakh language learning centers have been opened in both central and local executive bodies and universities. Compulsory language learning courses and record keeping in Kazakh language and level-based teaching of the state language in primary and secondary general education schools have been introduced. The education system, which had been mostly under the influence of Soviet Russia in the pre-independence period, has been nationalized with independence. Kazakh culture, which the Soviet period had ignored and even tried to destroy, has been given importance. Also, the language policy of teaching English was adopted, as it has become a world language alongside Russian (Yıldırım & Buluç, 2022, p. 249). In addition to these three languages, schools are also found

to provide education in four languages by adding Turkish, French, or German (Bolatova, 2019, p. 62).

Since the 2016–2017 school year, two hours of English as a foreign language have been added to the curriculum of the first year of primary education. As of the 2018–2019 school year, courses such as the History of Kazakhstan and Kazakh Language and Literature have been added. Since the 2019–2020 school year, chemistry has been taught in Kazakh in schools where Kazakh is not the medium of instruction. World history and Russian language and literature are taught in Russian in schools where Russian is not the medium of instruction, and Biology, Information Technology, and Physics are taught in English in all schools (Tastanbekova, 2018, p. 90).

Kazakhstan attaches importance not only to the nationalization of education but also to its international integration. The primary goal of Kazakhstan's education system is to raise education and training to international standards for economic development. For this purpose, international integration of education and training is sought through the policies the country implements. For this purpose, a network of special schools has been established for gifted children focusing on trilingual education. Such schools are supported, and their number is constantly increasing across the country. In this context, the Bolashak International Scholarship Program, which has been successfully implemented, contributes to increasing the number of English speakers in the country and thus contributes to the goal of a trilingual education.

One important work to be done for the nationalization of Kazakhstan's education system is related to the alphabet it uses. During the Soviet Russian era, the alphabet was changed in order to unite all affiliated republics under a single identity. While the Cyrillic alphabet has been used in Kazakhstan since 1940, the aim is to use the Latin alphabet that most developed countries in the world use. Infrastructure works are also being carried out to ensure this transition. The aim is to make the transition by 2025 (Kaplankıran, 2017, p. 45).

Conclusions

In 1991 when Kazakhstan declared its independence from Soviet Russia, it decided that it needed to focus on its education system in order to integrate into the world, to build its own national culture, and in particular to ensure its economic development. In addition to building its own

national culture, the country did not aim to create a uniform Kazakh nation in this process as had existed in the Soviet period. Instead, Kazakhstan preferred to respect the rights of other nationalities in the country and preferred multiculturalism. Since the year of independence, Kazakhstan has aimed to integrate its education system into the international arena significantly and as quickly as possible. Indeed, Kazakhstan has experienced a major economic and educational transformation since the beginning of the current century.

In the pre-independence Soviet period, Kazakhstan's education and training system was spread throughout the country in line with the economic and political practices Russia had implemented, and almost all of the population had access to education opportunities. The level of access to educational opportunities and the quality of education were relatively high, but the education system was shaped according to the Soviet identity, away from Kazakh culture and national values. Russian has been used as the dominant language in the education system, with Kazakh as the mother tongue having remained in the background. Russian policies have also influenced the curriculum. For example, the content of History and Religion courses has been shaped in accordance with Russian policies and interests.

During the post-independence period, economic inadequacies lasting for about 20 years, especially during the first decade, had caused the infrastructure of Kazakhstan's education system to deteriorate. For this reason, Kazakhstan had difficulty establishing an education system in accordance with its culture, history, and national values, even losing the support of a certain segment of the population. For this reason, the influence of Russia in Kazakhstan's education system has continued until today, albeit partially.

Since the 2000s, however, international integration has become more effective in Kazakhstan. Both the financial contribution of international financial resources to the education system and Kazakhstan's implementation of policies that emphasize integration into the international education system as an alternative to the Russian-influenced education system have yielded successful results. In the education system, a trilingual education system has been adopted as early as primary education, and the language of education is structured in Kazakh, Russian, and English. For higher education, the Bolashak International Scholarship Program was implemented for international education, and well-educated individuals

who speak Western languages, especially English, were brought to the country.

Kazakhstan wants to rebuild its education system in accordance with international standards, and the main goals it wants to set can be summarized as international quality in education, openness to innovation and continuous development, conformity with its own cultural values, and preparing individuals for social life and love for the homeland. In addition, the rights of Kazakhstan's citizens with other ethnic origins, especially Russian citizens, have been respected, and the right to education in their mother tongue has been recognized. In the post-independence period, Kazakhstan has attached importance to building its own national culture. To this end, history books have been rewritten with an emphasis on the Kazakh history and identity were emphasized. However, due to Kazakhstan having citizens from many different ethnic backgrounds, especially Russians, historical events from the Soviet period such as the heroic events of World War II that had a unifying role for citizens of different ethnic backgrounds, have been left as they were written and remain unchanged.

Kazakhstan has built its education system upon the triple pillars of Kazakh, Russian, and English. Kazakhstan has benefited from the positive aspects of the education system inherited from Russia and also started to build its own national culture and implemented innovation in the education system through international integration. Thus, Kazakhstan's education system has been taking firm steps forward in its international integration in accordance with the national and cultural values of the education system, the enacted laws, new programs and methods that have been implemented, and the policy documents that have been created. In this way, Kazakhstan is making continuous progress in its economic development and global competitiveness thanks to the education system it has developed.

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Preparation for Education in Emergencies: Current Educational Reforms in Pakistan

Syed Munir Ahmad and Muhammad Kashif Saeed

Introduction

With one of the highest birth rates in the world, the population of Pakistan has reached 230.4 million, up by 8.1% (17.2 million people) since the 2017 census (*The News International*, April 15, 2023). The population of Pakistan, ever-increasing at such phenomenal rates, puts it at risk of various catastrophes and emergencies. In other words, emergencies can strike at any moment, disrupting normal life and posing a threat to people's safety, health, and well-being. Having an understanding of emergencies is crucial for effectively preparing for, responding to, and recovering from them. Emergencies can take many forms (e.g., natural disasters, accidents, pandemics, conflicts) and can have wide-ranging impacts on individuals, communities, and entire nations. Being equipped with the knowledge and skills to understand emergencies can help individuals and organizations minimize emergencies' effects and save lives. This requires a multidisciplinary approach that incorporates scientific, social,

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and organizational perspectives for identifying risks, developing contingency plans, and coordinating responses. Thus, having cognizance of emergencies means being able to assess risks, anticipate potential consequences, and take proactive measures to mitigate and manage the impacts of emergencies. In addition to facing natural and environmental catastrophes, Pakistan's public education system is in a state of emergency, as millions of students remain out of school.

According to UNICEF (2023, n.p.):

> *Pakistan has the world's second-highest number of out-of-school children (OOSC) with an estimated 22.8 million children aged 5-16 not attending school, representing 44% of the total population in this age group. In the 5-9 age group, 5 million children are not enrolled in schools and after primary-school age, the number of OOSC doubles, with 11.4 million adolescents between the ages of 10-14 not receiving formal education. Disparities based on gender, socio-economic status, and geography are significant; in Sindh [province], 52% of the poorest children (58 percent girls) are out of school, and in Balochistan [province], 78% of girls are out of school.*

Based on a 2021 study and report commissioned by *Dawn* newspaper, Faran and Zaidi (2021) provided insights into out-of-school children by province. As per their study, 32% of the total school-going children are out of school, which were over 20 Million in 2021; while at the provincial level OOSC's were 32% in Khyber Pakhtunkhwa, 47% in Balochistan, 24% in Punjab, and 44% in Sindh respectively.

Similarly, while out-of-school children has been one of the most challenging issues, the floods of 2022 in Pakistan also had a devastating impact on all aspects of life, with education being no exception. Damages to schools throughout Pakistan have been a key concern in the context of education in emergencies; for instance, damages to schools documented by the Education Sector Working Group (ESWG) were reported during the 2022 floods in 17,455 schools in Sindh, 2359 in Balochistan, 1458 in Khyber Pakhtunkhwa (KP), and 1250 in Punjab (OCHA, 2023).

The floods of 2022 have had a significant impact on the education sector in terms of school destruction and damage, the use of schools as temporary shelters for displaced people, the disruption of schooling and the ongoing academic year, the loss of learning materials, and the psychosocial stress children, adolescents, and teachers have experienced. According to preliminary data from provincial education departments,

more than 22,000 schools have been damaged or destroyed as a result of the floods in Sindh, Balochistan, Punjab, and KP, with at least 5500 schools being used to house displaced people. Large-scale destruction of school facilities during the 2022 monsoon floods has interrupted the education of more than 3.5 million children.

Thus, given that education is of prime importance for the progress and development of any nation, a natural or human-induced calamity or emergency in Pakistan can have devastating consequences for the education of children. Therefore, providing and continuing education in emergencies becomes all the more important. Given this backdrop, thus, education in emergencies is an important area of research and practice for all stakeholders, with implications for both policy and practice.

With this in mind, this chapter first discusses the current state of emergencies around the world, followed by a section on the context of education in emergencies. The chapter then presents policy frameworks for education in emergencies in Pakistan before discussing the situational context of education in emergencies in Pakistan, with a focus on the current status of educational reforms in Khyber Pakhtunkhwa, as well as the status of curricular reforms. The chapter then moves on to present the best practices and lessons learned from the collaborative efforts on education in emergencies in Pakistan, followed by a showcase of case studies and examples of education in emergencies in Pakistan. Lastly, the chapter presents future directions for education in emergencies in Pakistan.

Current State of Emergencies Around the World

Emergencies continue to be a significant challenge worldwide, with various types of emergencies affecting different regions of the world. From natural disasters to pandemics, conflicts, and political unrest, emergencies can disrupt social, economic, and political systems, leading to significant loss of life and property damage.

Natural disasters are a common type of emergency that affects many regions of the world. In recent years, hurricanes, floods, and wildfires have caused significant damage in many countries, including the United States of America, Australia, and Japan (Chartered Financial Analyst [CFA] DeLoughry, 2020; Institute, 2021; Smith, 2019). In addition, earthquakes, landslides, and volcanic eruptions have also impacted countries such as Indonesia, Chile, and Italy, leading to significant loss of life and property damage (Parisi & Pilato, 2018; United Nations Office for

Disaster Risk Reduction [UNDRR], 2020). Throughout all this, children naturally suffer the most, and this has implications for their education, social, emotional, and psychological well-being.

Pandemics have also had a significant impact on the world in recent years, with the COVID-19 pandemic being the most significant public health emergency in recent history. COVID-19 has caused significant loss of life, disrupted economic and social systems, and led to significant changes in the way people live and work (World Health Organization [WHO], 2020). COVID-19 has also highlighted the need for effective public health systems and emergency preparedness plans, particularly in low-income countries that have been disproportionately impacted by the pandemic (WHO, 2020). With better technological and IT systems in place, developed countries have coped relatively well by providing online learning opportunities to children. However, third-world countries have borne the brunt of all this, with the education of children and students of all levels disrupted the most, due to the lack of a robust IT base and the necessary mobile phones and computers. Parents' low socioeconomic background has also resulted in a majority of the students living outside the perimeters of major cities being unable to benefit from online learning.

A joint report (Azevedo et al., 2021) from the World Bank, United Nations Educational, Scientific and Cultural Organization (UNESCO), and the United Nation's Children Fund (UNICEF) argued that the COVID-19 pandemic had brought everything to a standstill and that education at all levels had been disrupted globally, with severe implications for and effects on learning as school closures have affected more than 1.6 billion learners. The crisis has exacerbated inequality in education. Similarly, progress made for children and youth in other domains has stagnated or even reversed. The COVID-19 crisis has forced the global education community to learn some critical lessons while also highlighting that transformation and innovation are possible. This joint report (p. 6) presents "new evidence on the severity of the learning losses incurred during school closures and charts a path out of the global education crisis, towards more effective, equitable, and resilient education systems." Azevedo et al. also argued that the highest priority for all countries should be the reopening of schools. To tackle the learning crisis, all countries must first address the learning data crisis by assessing students' learning levels. Similarly, to prevent learning losses from accumulating once children are back in school, countries should adopt learning recovery

programs containing evidence-based strategies. Moreover, in addition to addressing learning losses, addressing children's socioemotional losses is equally important. Furthermore, *building back better* requires countries to measure how effective their policy responses are at mitigating learning losses, analyze their impact on equity, and then use what they have learned to keep improving. Azevedo et al. concluded by suggesting that countries have an opportunity to accelerate learning and to make schools more efficient, equitable, and resilient by building on the investments made and lessons learned during the crisis.

Similarly, conflicts and political unrest are other types of emergencies that have affected many regions of the world. Ongoing conflicts in Syria, Yemen, and Afghanistan have led to significant loss of life, population displacements, and infrastructural damage (United Nations Office for the Coordination of Humanitarian Affairs [UNOCHA], 2021). In addition, political and civil unrest in countries such as Myanmar, Belarus, and Venezuela have led to significant social and political instability, affecting people's daily lives and well-being (Human Rights Watch [HRW], 2020, 2021).

The Context of Education in Emergencies

The context of emergency situations that are affected by disasters and conflicts is often contested, since the warring and affected parties have competing claims (Global Education Cluster & INEE, 2010). Moreover, local governments and aid workers often fail to meet their responsibilities and obligations toward affected communities (Global Education Cluster [GEC] & Interagency Network for Education in Emergencies [INEE], 2010). According to the United Nations Disaster Management Training Programme, "A disaster is a serious disruption of the functioning of a society, causing widespread human, material, or environmental losses which exceed the ability of affected society to cope using only its own resources. Disasters are often classified according to their speed of onset (sudden or slow), or according to their cause (natural or human-made)" (p. 4). However, before considering disasters and calamities and their impact on education, considering the context of the education system by stage, gender, and location in Pakistan will be worthwhile (see Table 1).

Qadeer et al. (2023) presented a holistic picture of the public education system starting from pre-primary through higher secondary school education. Continuing from the figures presented in the Introduction

Table 1 Enrollment by stage, gender and location (public sector)—2020–2021

Pakistan										
Stage	Class	Urban			Rural			Total		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Pre-Primary	Un-Admitted	18,946	17,664	36,610	207,510	129,515	337,025	226,456	147,179	373,635
	Kachi	234,493	240,619	475,112	1,348,427	1,136,201	2,484,628	1,582,920	1,376,820	2,959,740
	Total	253,439	258,283	511,722	1,555,937	1,265,716	2,821,653	1,809,376	1,523,999	3,333,375
Primary	Class 1	249,321	247,597	496,918	1,206,227	1,007,158	2,213,385	1,455,548	1,254,755	2,710,303
	Class 2	254,916	251,592	506,508	1,232,503	1,015,345	2,247,848	1,487,419	1,266,937	2,754,356
	Class 3	241,978	245,727	487,705	1,154,089	948,677	2,102,766	1,396,067	1,194,404	2,590,471
	Class 4	226,469	236,839	463,308	1,063,325	865,755	1,929,080	1,289,794	1,102,594	2,392,388
	Class 5	214,563	223,825	438,388	963,787	763,057	1,726,844	1,178,350	986,882	2,165,232
	Total	1,187,247	1,205,580	2,392,827	5,619,931	4,599,992	10,219,923	6,807,178	5,805,572	12,612,750
Middle	Class 6	221,702	235,170	456,872	660,629	483,094	1,143,723	882,331	718,264	1,600,595
	Class 7	237,689	250,050	487,739	646,034	476,239	1,122,273	883,723	726,289	1,610,012
	Class 8	236,374	243,371	479,745	588,077	433,331	1,021,408	824,451	676,702	1,501,153
	Total	695,765	728,591	1,424,356	1,894,740	1,392,664	3,287,404	2,590,505	2,121,255	4,711,760
High	Class 9	256,499	252,938	509,437	478,335	315,043	793,378	734,834	567,981	1,302,815
	Class 10	253,444	246,755	500,199	442,046	286,230	728,276	695,490	532,985	1,228,475
	Total	509,943	499,693	1,009,636	920,381	601,273	1,521,654	1,430,324	1,100,966	2,531,290

Pakistan										
Stage	Class	Urban			Rural			Total		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Higher Sec	Class 11	29,260	33,923	63,183	88,791	48,510	137,301	118,051	82,433	200,484
	Class 12	30,511	33,210	63,721	86,069	46,296	132,365	116,580	79,506	196,086
	Total	59,771	67,133	126,904	174,860	94,806	269,666	234,631	161,939	396,570
Grand Total		2,706,165	2,759,280	5,465,445	10,165,849	7,954,451	18,120,300	12,872,014	10,713,731	23,585,745

Based on Pakistan Education Statistics 2020–2021, p. 61. National Education Management Information System, Pakistan Institute of Education, NEMIS-PIE (PIE Publication No. 296), Ministry of Federal Education & Professional Training Government of Pakistan.

about out-of-school children and youth, with an estimated 22.8 million children aged 5–16 not attending school and representing 44% of the total population in this age group, Table 1 shows that 23 million children are attending school. In a situation where a little less than half of all children are out of school, the children that do go to school have to endure a number of issues and problems pertaining to learning and their overall development.

Education may not be considered a priority in emergency situations. Depending on the nature of the emergency and the way it has impacted society, however, children's education in emergencies is one of the key aspects of their well-being and future, as it also allows them to provide sustenance to their families. Providing education is a key requirement in all of this. A number of considerations influence the availability of teaching processes in emergency contexts. These include availability and access to schools, as well as school enrollment and gross and net enrollment rates (GEC & INEE, 2010). Education in emergencies can be provided in both natural and human-made disasters. Natural disasters include such things as hurricanes, earthquakes, droughts, tsunamis, and epidemics, while human-made disasters include terrorism, clan or tribe feuds, wars between countries, and other human-induced disturbances. Complex emergencies may include both natural and human-made disasters, in addition to being protracted and chronic emergencies that extend for long periods with no end in sight. In this regard, one should note that the recent 2022 floods in Pakistan have had a catastrophic impact on all sectors; according to the post-disaster damages needs assessment carried out by the Ministry of Planning and Development, the overall sectoral damages amounted to 14,906 Million USD, the total losses were put at 15,233 Million USD and the total needs amounted to 16,261 Million USD. Out of the total needs, education alone required 918 million USD, which hasn't been forthcoming during the response phase.

Given these figures and the problems that beset all these sectors, education in such emergencies may not have been considered a main priority. Therefore, one must envision having education in emergencies be aimed at providing "quality education opportunities that meet the physical protection, psychosocial, developmental and cognitive needs of people affected by emergencies" (Global Education Cluster & INEE, 2010, p. 5). A significant number of children should also be noted to have remained out of school in emergency contexts, where children and

youth often remain neglected. In such contexts, children are vulnerable to harm and exploitation. With their access to schooling compromised, children are often recruited as child soldiers by armed groups and often involved in unhealthy activities.

Policy Frameworks for Education in Emergencies in Pakistan

Over the last few decades, and especially very recently, Pakistan has been hit hard by a series of natural disasters, such as earthquakes and severe floods. These disasters have had a significant impact on all aspects of life including education and have disrupted the learning of millions of children. To address these issues, the Government of Pakistan (GoP) has developed several policy frameworks for education in emergencies.

Following the devastating earthquake of 2005 that killed thousands of people in India and especially in Pakistan, the rebuilding of infrastructure and many schools has yet to be completed, with people's livelihoods still in shambles. In this regard, the GoP's (2009) National Educational Policy of 2009–2015 envisaged addressing and mitigating the impact of emergencies on the education sector (Ahmad & Hussain, 2014). Thus, the Education in Emergencies Policy (EEP) is one of the most significant post-disaster policy frameworks in Pakistan. The EEP is a comprehensive policy framework that outlines the government's strategy for addressing the educational needs of children affected by emergencies.

Under the EEP, the GoP has developed several strategies to address the educational needs of children affected by emergencies; one of these strategies being the establishment of temporary learning centers (TLCs). Due to Pakistan being one of the countries affected by global warming, the country very recently in the last decade or so has been devastated by severe floods, playing havoc with everyone's lives there. With the support of UNICEF, TLCs that were established in response to the floods of 2010 and 2022 in the Provinces of Sindh and Balochistan remained instrumental in providing education to thousands of children (Korar, 2022; Malik, 2011). These centers were set up in areas affected by emergencies and have provided children with safe and conducive learning environments. Another strategy has been to provide psychosocial support to children affected by emergencies (United Nations High Commissioner for Refugees [UNHCR], 2020). This support has been provided

through counseling and other activities that help children cope with the psychological effects of emergencies.

Prior to its initiation in 2012, planning for the National Disaster Management Plan (NDMP) had gotten underway following the 2005 earthquake and, owing to the fact that Pakistan ranks in the top 10 countries that are the most vulnerable to climate change effects, "started planning to safeguard and secure the life, land and property of its people in particular the poor, the vulnerable and the marginalized" (NDMP, 2012, p. iii). The NDMP is a comprehensive policy framework that outlines the roles and responsibilities of different stakeholders in disaster management, including the education sector.

Under the NDMP, the Government of Pakistan has developed several strategies to prepare the education sector for emergencies. One of these strategies has been to establish emergency response teams for search, rescue, and evacuation and to conduct education, training, and public awareness programs for local officials, stakeholders, and communities in schools. These teams are responsible for ensuring the safety of students and staff during emergencies and for providing first aid and other essential services. Another strategy has been to develop contingency plans for schools. These plans outline the steps that schools should take in the event of an emergency, such as the evacuation of students and staff.

According to Ahmad and Hussain (2014), Pakistan's policy frameworks for education in emergencies have several strengths, one of the most significant being their comprehensive nature. The policy frameworks cover all aspects of education in emergencies, from preparedness to response and recovery. Additionally, the policy frameworks are based on the best international practices and standards, ensuring their effectiveness and relevance.

However, the policy frameworks also have several weaknesses (Ahmad & Hussain, 2014), one of the most significant being the lack of implementation. Despite the presence of comprehensive policy frameworks, the education sector in Pakistan remains vulnerable to emergencies. The GoP has been criticized for not providing adequate funding or resources for implementing the policy frameworks (Ahmad & Hussain, 2014; Ahmad et al., 2014). Additionally, a lack of coordination is found among different stakeholders, which hinders the effective implementation of the policy frameworks.

Situational Context of Education in Emergencies in Pakistan

Pakistan boasts one of the lowest net enrollment rates (NERs) globally. In particular, districts that have been affected by emergencies have one of the lowest enrollment rates. For instance, in the Khyber Tribal District in the Khyber Pakhtunkhwa (KP) Province, the NER at the primary level for boys and girls is only 18.26%, while it is 5.3% for secondary school students. Even though Pakistan's constitution guarantees the right to education for children, the inability of the State to ensure children's access to schooling is a serious breach of their rights (UNESCO, 2010). Moreover, during the recent conflicts and instabilities, school-going children and school-associated infrastructure were targeted. Thousands of schools were deliberately destroyed during the conflict, and female students such as Malala were attacked (Khan & Nyborg, 2013).

Consequently, the operations resulted in bringing peace back to the region. However, one needs to note that the peace that returned needs to be critically analyzed. Upon such a critical analysis, one can still observe strong structural issues and weaknesses in the society, which implies that the achieved peace is not long-lasting, and the peace-building literature classifies this as negative peace (Khan & Nyborg, 2013). In such a situation, providing children with education still faces significant challenges. A number of failures have been reported in northwestern Pakistan in relation to access to education (Nation, 2019). For instance, during the conflict, nearly 75% of female students had dropped out. Similarly, teachers were intimidated, killed, and barred from going to schools.

Assessing how conflicts and emergencies affect children's education is important. Moreover, policies that regulate education in emergencies in the context of KP need to be reviewed. KP and Baluchistan have a highly centralized system that administers the education system, with the Department of Elementary and Secondary Education having oversight for administering the schools and managing the education systems. Another critical aspect in emergency situations and zones is the lack of accurate empirically based data. This is also the case with Pakistan, specifically in the case of KP and Baluchistan which have been badly affected by emergency contexts and situations. The lack of baseline data on ensuring reliable access and problems with reporting have affected the reliability of schooling data from KP and the former Federally Administered Tribal Areas (FATA). Moreover, qualitative and issue-based problems with child

schooling are even more severe, as these are often based on interviews with anonymous officials (Khan & Nyborg, 2013). The key actors in the Pakistan education system in the context of emergencies include line ministries, donors, aid agencies, children and host communities, and disaster response officials.

Current Status of Educational Reforms in Khyber Pakhtunkhwa

Some periodic reforms have occurred in KP's educational system over the last two decades. Most of these reforms have been focused on increased educational infrastructure in particular school buildings, induction of teachers, and enrollment in the primary and secondary school systems. However, the government's educational school management and administration is still following the practices that have been enforced since the 1980s when old bureaucratic red tape held sway. For example, a single directorate, the Directorate of Elementary and Secondary Education (ESE), and the attached line department (i.e., the Elementary and Secondary Education) have a complete mandate for the transfer and management of schooling infrastructure throughout the KP province (ESE, 2023). The ESE Department and Directorate retain complete autonomy in administering and managing the whole educational system throughout the province, whose number of teachers alone amounts to 1,19,000 individuals in over 29,000 elementary and secondary schools.

In addition, the individuals employed in the Directorate of ESE and the ESE line department continue to retain their positions, over extended periods of time, which has led to problems of a differential nature that includes leakages, favoritism, stagnancy, and demotivation of the major and most important stakeholders (i.e., the primary and secondary school teachers). Only the secretariat staff which includes the administrative grade secretaries are rotated periodically. Meanwhile, the major officials belonging to the directorate and line department either remain in their positions for extended periods of time or manage to withhold their rotations by influencing the system, which has had repercussions in terms of affecting and stalling ongoing reforms, inhibiting transparency, causing corruption, and demoralizing staff, particularly the teachers in far-flung and remote areas (Nation, 2019). These teachers have to access the directorate for their time off and other applications including bills, which further affects their output and quality of teaching.

Moreover at the provincial level, an independent monitoring unit (IMU) was initially set up in the education department in 2013 in a project mode under the financial and administrative support of the Department for International Development (DFID) from the United Kingdom and later was transformed into an authority in 2019 (IMU, 2023). The IMU oversees different indicators relating to attendance and other key performance indicators (KPIs) relating to schooling and teaching. This in effect has created a parallel system. Meanwhile, questions are found related to the long-term ownership and sustainability of the authority.

What seems clear is that the education department has an extensive network of schools and offices that runs the length and breadth of the country. The Department has and can play an effective role in times of emergencies, such as in floods, earthquakes, and elections. However, issues exist regarding transparency, corruption, and catering to the needs of the population that suffer during emergencies. These may all be due to a less professionally trained workforce who have not been appropriately trained and are not ready to work under strenuous conditions to provide appropriate all-around services, especially regarding education in emergency situations.

During emergencies, the education system requires immediate and substantial reforms to address the specific needs of the affected population. However, the existing bureaucratic practices and lack of transparency can hinder these efforts, leading to the mismanagement of resources and the marginalization of already vulnerable populations. To address these issues, ensuring that the education system in emergencies is based on participatory and inclusive approaches that involve all stakeholders, including teachers, parents, and community leaders, is essential. The reforms should focus on creating a transparent and accountable system that promotes teacher motivation and provides incentives for quality education. The establishment of independent monitoring units such as the IMU in KP can be a useful tool for ensuring the effective implementation of education policies and programs. However, sustainability and ownership of such units must be ensured in the long term.

Status of Curricular Reforms

Half-hearted measures have been taken since 2009 for educational reforms in ESE in KP for reforming school curricula (Idris & Saeed, 2021). However, these reforms have failed to achieve the desired results, as they have lacked both the political will for problem-solving as well as a focus on ineffective teaching and the biases involved in the curriculum.

After the 18th Amendment, small cosmetic changes are found to have been made to the curricula throughout Pakistan and especially in Khyber Pakhtunkhwa. However, instead of promoting critical thinking and inculcating modern research skills in students, these half-hearted measures have led to unhealthy competition, confused structures, slow reforms, and a lack of modernization in the student curriculum. This in turn has led students to have learning, teaching, and understanding problems compared to the students of neighboring countries such as India, Sri Lanka, and Bangladesh (UNICEF, 2020). For instance, the curriculum reforms at the high school level in India were completed in the mid-2000s, with new textbooks having been written and taught since then. These have opened Indian students to faculties related to demonstrating and focusing on research, with an emphasis on citations and interpretation of different events (UNICEF, 2020). This has also provided Indian students with opportunities for linking theory with practice and results-oriented learning, which has been one of the most conspicuous weaknesses in practice in Pakistan's educational system.

The implications of these issues for education in emergencies are significant, as they suggest that the educational system in KP, and for that matter in other provinces, may not be well-equipped to respond to the unique challenges emergency situations pose. Inadequate curricula and teaching methods may leave students ill-prepared to cope with the disruptions and changes that come with emergencies and may also limit parents and teachers from contributing meaningfully to recovery efforts. Therefore, having policymakers and educators address these issues is important in order to ensure that Pakistan's educational system becomes more resilient and effective at responding to emergencies.

Best Practices and Lessons Learned from Collaborative Efforts on Education in Emergencies in Pakistan

As discussed above, Pakistan is prone to natural disasters, conflicts, and other emergencies that disrupt education systems and prevent children and young people from accessing education. In response, various organizations have implemented collaborative efforts to provide education in emergencies.

Best Practices in Education in Emergencies in Pakistan

Partnership and Collaboration: Collaboration and partnerships between various organizations are crucial for ensuring the effective delivery of education in emergencies. Collaboration between government, non-governmental organizations (NGOs), public–private partnerships (PPPs), and other stakeholders can help to leverage resources, share knowledge and expertise, and avoid duplication of efforts (Ministry of Federal Education and Professional Training [MoFEPT], 2020). For example, the Pakistan National Education Response and Resilience Plan (PNER&RP) for grades K-12 regarding COVID-19 involves a collaboration between the GoP and several international organizations, including UNICEF and Save the Children, to provide education in emergencies.

Flexible and Adaptive Programming: Providing education in emergencies requires flexible and adaptive programming that can respond to the changing needs and context of affected communities. Flexible programming includes a range of delivery models, such as temporary learning spaces, accelerated learning programs, and non-formal education. For example, the PNER&RP in Pakistan provides formal and non-formal education for children who are unable to attend formal schools due to displacement or other emergencies.

Community Participation: Community participation and engagement are crucial for the success of education in emergency programs. Communities have local knowledge and expertise that can help to ensure that programs are culturally appropriate and able to respond to the specific needs of affected communities. For example, the Pakistan Reading Project

(PRP) is a collaborative effort between the GoP and several international organizations to improve children's reading outcomes. The project involves the participation of community members, including parents, teachers, and local leaders, in designing and implementing reading interventions.

Lessons Learned from Collaborative Efforts in Education in Emergencies

Some lessons learned from implementing education in emergencies are discussed as follows:

Sustainability: Education in emergency programs must be sustainable to ensure long-term impact. This requires a focus on building the capacity of local education systems and ensuring that programs are integrated into national education systems. For example, the PNER&RP for grades K-12 during COVID-19 aimed at building the capacity of the education system to respond to emergencies and at ensuring that education in emergency programs is integrated into national education plans.

Quality: The quality of education in emergency programs is essential in ensuring that children and young people receive an education that meets their needs and prepares them for the future. Quality education requires trained and qualified teachers, appropriate learning materials, and a safe and secure learning environment. For example, the PNER&RP for grades K-12 during COVID-19 in Pakistan has included training for teachers and the provision of learning materials to ensure the quality of education.

Monitoring and Evaluation: Monitoring and evaluation are crucial for ensuring that education in emergency programs are effective and efficient. Monitoring and evaluating help to identify areas for improvement and ensure that programs are achieving their intended outcomes. For example, the Pakistan Reading Project includes a robust monitoring and evaluation framework to ensure that reading interventions are effective at improving children's reading outcomes.

Case Studies and Examples of Education in Emergencies in Pakistan

As discussed above, Pakistan is prone to facing various emergencies that include natural disasters, conflicts, and displacements which severely impact the education of children and young people. As a result, several organizations have implemented education in emergency programs to provide access to education in crisis-affected areas. Case studies and examples of education in emergency programs in Pakistan are discussed as follows:

Pakistan National Education Response and Resilience Plan (PNER&RP)

The PNER&RP is a collaborative effort between the Government of Pakistan and several international organizations, including the United Nations Children's Fund (UNICEF) and Save the Children, to provide education in emergencies. The program aims to provide temporary learning spaces, teacher training, and non-formal education to children affected by emergencies. For example, during the COVID-19 pandemic in Pakistan, the PNER&RP provided education to millions of children.

Pakistan Reading Project

The Pakistan Reading Project is a collaborative effort between the GoP and several international organizations, including the United States Agency for International Development (USAID), to improve children's reading outcomes. The project aims to improve the quality of reading instruction in primary schools through the provision of teacher training, teaching and learning materials, and community engagement. For example, the project has trained over 40,000 teachers and distributed over 12 million reading books to primary schools across Pakistan.

Khyber Pakhtunkhwa Education Sector Program (KESP)

KESP is a program funded by the DFID to support the education sector in the KP province of Pakistan. The program aims to improve access to

education and the quality of education in the province, including in crisis-affected areas. For example, KESP has supported the construction of over 200 new schools in the province, including in areas affected by conflict.

Education in Emergencies Working Group (EiEWG)

The EiEWG is a collaboration among various organizations including the GoP, UNICEF, and Save the Children for coordinating Pakistan's education in emergency programs. The group aims to strengthen the education system's ability to respond to emergencies, including by developing emergency preparedness plans and providing training for teachers and education officials.

Education Above All Foundation (EAA)

The EAA is a global foundation that supports education in emergency programs in several countries, including Pakistan. In Pakistan, the foundation has supported the provision of education to children affected by conflict in the former Federally Administered Tribal Areas (FATA) and KP province. The foundation has supported the construction of schools and the provision of teaching and learning materials.

Future Directions for Education in Emergencies in Pakistan

Education in emergency programs are critical for addressing the challenges that arise due to crises such as conflicts, natural disasters, and displacements. Pakistan has been prone to these crises, and as such, the need for effective education in emergency programs has become essential. Practitioners, policymakers, and all other stakeholders need to consider future directions for education in emergencies in Pakistan by focusing on the areas that require immediate attention, to ensure that the education needs of crisis-affected children are met, as discussed below.

Gender inequality has been a significant barrier to access to education for girls in Pakistan, and this issue has been amplified in crisis-affected areas. Education in emergency programs must be tailored to address this issue, ensuring that girls' education is prioritized and that they are given the same opportunities as boys. This can be done through targeted interventions such as gender-sensitive curriculum and teacher training,

safe spaces for girls, and community engagement programs that promote gender equality. While both the government as well as national and international non-governmental organizations have been addressing the issue of gender inequalities and disparities in education at all levels of education, with ever-increasing socioeconomic disparities, natural disasters, and calamities, attaining gender parity and equity in education is a huge challenge for all. Throughout all this, sufficient funding and its appropriate utilization have been some of the basic concerns of both donors and stakeholders.

Education in emergencies therefore requires adequate funding to ensure that crisis-affected children have access to quality education. In the recent past, Pakistan has seen and borne the brunt of natural disasters and human-induced calamities such as earthquakes and global warming. The very recent severe flooding has had a catastrophic impact on all aspects of life. The World Bank (2020) has estimated that Pakistan suffered $30 billion USD in flood damage and economic losses. Therefore, the international community should increase their investment in education in emergency programs, including funding for the construction of temporary learning spaces, teacher training, and the provision of teaching and learning materials. Similarly, education in emergency programs must be integrated with national education policies to ensure that they align with the government's priorities and long-term development goals. This will also enable sustainability and ensure that education in emergency programs are not seen as standalone interventions but as part of a broader national education system.

Moreover, the COVID-19 pandemic has highlighted the importance of technology in education delivery, particularly in crisis-affected areas where access to physical schools is limited. Education in emergency programs can leverage technology and distance learning to ensure that children have access to education, even under the most challenging of circumstances. Teachers have an important role in all of this and are a critical component of education in emergency programs; thus, their development should be prioritized. Programs that focus on training teachers in crisis-affected areas should be established to ensure that teachers have the necessary skills to deliver quality education under challenging circumstances.

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The Complexities of the Slovak Higher Education Development

Julius Horvath and Rene Matlovič

Introduction

After the breakup of socialism and the foundation of an independent Slovakia in 1993, Slovak economic growth was fundamentally healthy, especially in the 1998–2008 period. Driven by foreign direct investment, Slovakia was on a convergent path with the more advanced European nations. However, this growth rate slowed down after the financial crisis of 2008–2009. Currently, Slovak growth rates are level with the more advanced European countries. Namely, the country's convergence with the core of Europe has slowed down significantly.

Similar to other former socialist countries such as Hungary and Poland which have been facing a middle-income trap for a more extended historical period, Slovakia has been unable to become a part of the more prosperous Western Europe. Slovakia has a comparative advantage in the assembly and production of relatively complex durable goods,

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skilled labor with knowledge of medium-high-level technology, and labor-intensive export industries, and these advantages do not require an elite high-performing education system, as the innovations typically flow through foreign transnational enterprises. Apart from the path-dependent factors, this is one of the reasons why an absence of substantial higher education investment has been observed. Even in the space of the European Union Slovakia is not expected to become a high-quality education provider. Consequently, one can expect a continuation of a brain drain of the elite and spirited students of Slovakia.

After the breakup of socialism, Slovakia became a part of the Western European economic sphere. However, having policymakers define and support the country's comparative advantage, which would speed up the convergence to the core countries, has appeared quite difficult. Many domestic and foreign observers consider improving the level of education (i.e., increasing the quality of the domestic human capital) as a possible way to guarantee the country's ability to escape the middle-income trap and converge with Western economies. This paper investigates the role education, especially higher education, has in this process.

We begin with a short presentation of the higher educational institutions in the territory of today's Slovakia and followed this with a short review of educational development after Slovakia appeared on the European education map, which occurred after 1918 with the emergence of the Czechoslovak state. We continue with a general description and analytical remarks concerning the Slovak higher educational system, showing how the character of education had changed after the emergence of the independent Slovak Republic. For example, over the last 30+ years, the number of students in Slovak higher educational institutions has significantly increased, as well as the number of universities providing tertiary education. This has had several positive consequences but negatively affected the quality of higher education. Consequently, many Slovak students have opted to study outside of Slovakia in the neighboring countries' higher educational institutions. In 2018, almost 32,000 Slovak citizens were studying in foreign countries, while around 12,000 international students were studying in Slovakia (Ministry of Education, Science, Research and Sport of the Slovak Republic [MŠVVŠ], 2020, p. 7).

Another significant change in Slovakia's post-1993 higher education was a substantial increase in student interest in social science, business, and humanities, especially in management, economics, political science, public policy, and social work. Consequently, one observes a decrease in

the interest in the studies that used to be provided at a higher level of quality under the socialist government in the natural sciences (e.g., mathematics, physics), as well as the disciplines that are required by the needs of heavy industry. This has created a mismatch between what the universities provided and what was required in Slovakia's domestic and international industries in particular.

In addition, we attempt to map the responses of the Slovak authorities to these developments and provide more analytical insights into the Slovak higher education system. In the last section, we discuss the development of the spirit of Slovak universities' identity. Primarily, we concentrate on the period after 1993 when the new country's development principles were laid. In the early period after the collapse of socialism, the new post-socialist leaders had a critical opinion about human capital being concentrated in academia and universities. Also, the new process of decentralization in education had begun. "What was meant as an attempt at decentralization resulted in a confusing distribution of powers and responsibilities that can render a democratic and effective governing of academic institutions today very difficult" (Jarab, 1993, as cited in Lehman, 1997, p. 7).

To compensate for the limited resources being provided to the higher education sector, the state guaranteed universities excessive freedoms concerning academics and governance. The state remained the primary provider of funds for higher education, and this dependence on the state has created an unhealthy situation. Private sector contributions are minimal, as affluent local citizens rarely invest in higher education. Too much liberty at the level of higher education institutions has led to the preservation of the status quo and a rule of vested interests that are under weak societal control and that rebel against any changes by posing as the protectors of academic liberties. Overall, we observe and analyze various tensions in this paper, underscoring the impact higher education has had on the general development in Slovakia.

Short Historical Overview

Here we provide some introductory words on the history of higher learning in the territory of today's Slovakia and present a short sketch of university development from 1918 to the present. During Matthias Corvinus' rule in Pressburg (Bratislava), the university *Universitas Istropolitana* was founded, which existed from 1465 to 1490. This university achieved

a status comparable to other European universities with its four faculties (i.e., humanities, law, medicine, and theology; Császár, 1914, pp. 47–49). In the sixteenth century, Jesuits founded some smaller colleges, with Cardinal Péter Pázmány influencing the Jesuits' decision to settle in Trnava, the seat of the archbishops during the Ottoman occupation of Esztergom. The Society proceeded with the University of Trnava's foundation in 1635 with the faculties of theology, philosophy, and law (Mihalik, 2016). Later on, Hungarian aristocrats supported moving the university to Buda (Fináczy, 1899). In 1665 in Prešov, a Lutheran collegium was founded to compensate for the power of Jesuit institutions in Košice and Trnava. The Bishop of Eger founded a *studium generale* in Košice in 1657. Since around 1763 in Banská Štiavnica, the *Banská akadémia* [Mining Academy] was in operation, which moved to Hungary after World War I (Kirschbaum, 2007, pp. 26, 59). In 1763 the *Collegium Oeconomicum* in Szempcz (Senec) opened and focused on state economic and administration issues. The Catholic Legal Academies that had been in Trnava later moved to Pozsony and Košice, while the Evangelic Academy remained in Prešov. The Czechoslovak government closed these Legal Academies in 1922. In 1912, the Elisabeth University in Bratislava was finally founded and had four colleges: The Law, Medicine, and Liberal Arts Colleges, as well as the College of Legal and State Sciences. The new Czechoslovak authorities terminated this university's activity, with the university moving from Bratislava to Pécs in 1919–1921.

After 1918, the situation regarding Slovak higher education fundamentally changed, as education at all levels in the Slovak language emerged. Comenius University was founded in 1919 and developed into three faculties (i.e., law, philosophy, and medicine), with the faculty of natural sciences founded in 1940. In June 1937, the Czechoslovak National Assembly approved the establishment of a technical university in Košice. However, once Košice became part of Hungary in the fall of 1938, this school moved to other locations and finally to Bratislava, where it emerged in 1939 as *Slovenská vysoká škola technická* [Slovak University of Technology]. In October 1940, the *Vysoká obchodná škola* [High School of Business] was founded in Bratislava (Ekonomická Univerzita, 2011, p. 13). In September 1945, *Vysoká obchodná škola* was renamed *Slovenská vysoká škola obchodná* [Slovak High School of Business] and nationalized.

A massive change in education emerged after the communist coup d'état. After 1948, the Communists nationalized private universities. Various faculty and student purges occurred in the early years of socialism,

especially in the social sciences and humanities, with the intent being to replace the old-style faculty with new socialist cadres. The situation was significantly healthier in the natural sciences and technology disciplines, where "islands of quality" emerged around scholars with international reputations, albeit not often (Pišút, 1993, p. 422).

Starting in the 1960s, a large number of new research institutes were founded. In this period, the Czechoslovak state invested significant funds into building various sectoral research institutes and sector-oriented universities such as the Slovak University of Agriculture and the University of Veterinary Medicine. In addition, the new University of Pavol Jozef Šafárik was founded in Košice, with a medical faculty also in Košice and a philosophy faculty in Prešov.

The establishment of new universities continued after the breakup of the socialist order, with new private universities also emerging. Altogether, more than 30 universities and institutions of higher education currently exist in Slovakia.

Some Observations of the Economics of Education in Slovakia

Tertiary education under communism was relatively elite (i.e., only a small percentage of high-school graduates could continue their education). Naturally, educational administration in the socialist system was heavily controlled and manipulated by the centralized structure of society. After the breakup of socialism, many secondary school graduates and their families preferred to enter higher educational institutions. These demand-side changes were not initially matched by educational supply. Gradually, several new higher education institutions were founded, and the number of university students significantly increased. From a historical perspective, higher education in Slovakia had transformed from a privilege during the interwar and socialist periods to a right to study.

Marginson (2016, p. 415) pointed to the fact that a widespread universal desire was found for social betterment, one which transformed higher education into a universal requirement. Also, the expectations of families and communities in Slovakia are that young people should for the most part graduate from college. In the initial years after gaining independence, in particular, such a situation had helped social problems such

as unemployment and youth criminality. However, higher student enrollment rates neither led to higher wages nor improved the social status of the teachers, rather quite the opposite occurred. Educators remained with modest salaries and low social status.

After receiving independence, Slovak education underwent different stages adjusting to the new conditions. From 1993 to around the end of the last century, the situation was initially quite unhealthy: What prevailed was a lack of financial resources, unresolved issues of identity, and problems regarding the effectiveness of faculty and students. Lehman (1997, p. 6) wrote that higher education reflected the conditions in society. Even data for 2000 indicated that, among all OECD countries, the Slovak Republic had spent the least on higher education relative to the GDP (Barr, 2004, p. 277). In other words, public expenditures on education and research were not a priority of policymakers and the political elite.

After the breakup of socialism, most of the student intake increase was in disciplines that represented the demand of the new societal structures, such as business education, political science, and social work, while expansion in the technical and natural sciences happened to a much lesser degree. A large and growing number of university graduates intensified the mismatch between the ability of higher education institutions to generate university graduates and the economy's ability to create jobs for these graduates. This apparent mismatch has been typical for the country, as many graduates work in a field different from their educational background. This mismatch also potentially negatively impacts the possibilities for growth.

The accumulated economic analysis of education in the Western world suggests that the provision of schooling is largely inefficient. This has held more under the Slovak conditions. Standard inputs such as class size, teacher research, and teacher education bear a small systematic relationship to student outcomes, implying that improving the input policies is unlikely to expand achievements. At all levels of education in Slovakia, one observes no systematic relationship between resources and student outcomes. In other words, a substantial increase of resources in education does not necessarily lead to a clear improvement in the quality of education nor to improvements in students' educational results. Slovakia is above the income per capita threshold, above which in contrast to developing countries, a closer relationship between resources and results becomes less clear. In other words, as a member of the Organisation for Economic Co-operation and Development (OECD), Slovakia

shows increased spending on students; however, this has not led to any noteworthy improvement in terms of student achievement.

As Heckman (2006) showed for more developed countries, one also observes a considerable difference in the educational preparation of children and teenagers in Slovakia, one which endures into tertiary education. The formation of cognitive as well as socioemotional skills begins very early in a child's life. Children from poorer and less educated families are much less likely to complete high school and college than children from better-off families, even if the requirements for completion are lowered considerably. Today, inequalities in Slovak society also allow students from top-income families to acquire a broader and more accessible linguistic competence, which is needed for citizens of a small country, as well as cultural knowledge of the particularly dominant Western culture.

However, the difficulty is in stating that higher education in Slovakia generally reproduces and petrifies social inequality. One of the reasons is that no clear ranking exists for Slovak universities. While some new universities have obtained relatively low academic respect, developing a sustainable ranking among the older state schools is very difficult. The petrification of inequality would require a more distinct ranking to confirm that students from more affluent families graduate from better-ranked schools. Accreditation committees do not rank the universities, and the market has been unable to resolve the issue. Privately formed ranking agencies founded by eminent research professors have shown that ranking in such a small country is very volatile, with the faculty ranking high one year and then ranking differently the next year.

The difficulty is had in telling which are the elite Slovak institutions, as no concentration of elite education is found in the capital or other bigger cities. Undoubtedly, the higher education institutions in larger towns provide better networking and job opportunities for graduates. Still, even these institutions are not distinguished in the European academic rankings. The universities are not open to international faculty, as most professors are Slovak nationals. The governing boards, deans, and rectors are mostly elected from the local scientific community. In some disciplines such as economics, many Slovak nationals work outside their home country in research-intensive universities once they leave the domestic universities (Horváth, 2022).

As in most countries, people with higher education in Slovakia, especially with competitive foreign degrees, achieve higher remuneration. In other words, the microeconomic evidence supports the positive

wage impact of education. However, the overall effect on the economy's growth is much less clear. As Hausmann (2015) documented, the increased number of graduates in higher education institutions does not necessarily transform into an increased national income growth rate. In the Slovak case, schooling quality is relatively low, at least in around half of the colleges, which could be why schooling quality has not helped raise economic productivity. An additional factor that has not supported economic growth is the already mentioned mismatch, as the labor supply often does not react to the demands of the industry (Horváth, 2018).

Slovakia has an administrative structure that is difficult to understand. The country of five million inhabitants is divided into 10 regions and almost 80 counties. One of the prominent roles of these administrative units is to employ those who have graduated, primarily those from Slovak universities. The government responds to political pressure from potentially unemployed educated job seekers and becomes their last resort employer. The large bureaucratization of the Slovak state has also led to a variety of unproductive activities, which could have been remunerative for the involved individuals. However, these could also be socially less important jobs with minimal consequences for growth. For thousands of civil servants in the counties, regions, and ministries, difficulty is had in differentiating between productive and rent-seeking activities.

For most administrative jobs in Slovakia these days, young employees are expected to have a bachelor's and even a master's degree. The students, especially those in the social sciences and humanities, know the working requirements at state institutions. Being aware of the future job requirements in the state sector has led to limited learning being prevalent at Slovak colleges. Working station hubs are typically found in Bratislava, where the elite students from foreign colleges and the more spirited domestic students form a different work atmosphere.

The idea of creating competition with the large state universities led to the creation of private universities. For example, one law in Slovakia allows the establishment of a private university if it achieves accreditation for one bachelor's program. However, the system of private-for-profit universities could have delivered more satisfactory results. They are primarily non-endowed universities, which influences their vision regarding the quality of university education. In addition, private universities were often established in small cities, typically without academic traditions, and often focused only on vocational training for students who already worked or could not afford to study at more prominent universities. Furthermore,

the state heavily subsidizes education in Slovakia. Tuition at private higher education institutions is low and almost nil at state institutions.

The Identity and Place of Universities in the Face of Recent Challenges

Socially Relevant Universities as a Theoretical Framework

The current turbulent situation poses a number of challenges for universities and has been fundamental to how universities have been able to deal with the often ambivalent expectations of different societal actors while maintaining their identity as a distinct type of institution. On the one hand, universities should produce original research results at an excellent level. On the other hand, they are required to immediately transfer the acquired knowledge into industrial, social, and economic practice to have an entrepreneurial spirit and to establish start-up and spin-off companies. With regard to education, universities are to respond flexibly to the changing and often unpredictable demands of potential employers as well as form intellectual elites who will be able to respond creatively, wisely, and with the appropriate ethos to future challenges. At the same time, universities should provide an engaging and vibrant environment and teaching and learning experiences that comply with the needs, interests, and expectations of the current generation of students. One cannot forget the third mission of universities, which is mainly their social responsibility for developing and enhancing the quality of life in communities within their spatial influence. Does the question arise as to whether all these requirements can be met in one place under the institutional umbrella of the university? Should universities be managed by academicians based on elections within the academic community or by professional managers appointed by the external environment? What can serve as an indicator of a university's success (Matlovič, 2014)? In the end, universities are likely to undergo major changes (Barber et al., 2013).

When seeking an adequate answer to the above questions and formulating a basis for outlining an adequate identity for universities in the twenty-first century, one must move away from orthodox approaches that favor a pure academic identity for a university while at the same time not compromise regarding the key attributes that are the pillars of the identity of universities as a distinct type of institution. The starting point is a move toward heterodox approaches that allow for a hybrid organization based

on an appropriate balance between applying traditional academic principles and the entrepreneurial principles of a business organization. One possible starting point is the theoretical concept of the socially relevant university, which we will outline later in the paper (Matlovič, 2014).

The aim is to find a concept that provides an appropriate theoretical framework for the strategic governance of universities in the current context. The concept of the social relevance of a university has this potential. For example, this was pointed out by Martin (2011, p. 615), according to whom universities have come under increasing pressure to demonstrate their economic and social relevance. When conceptualizing the social relevance of a university, one needs to remember that it is a relative concept (i.e., what makes a university relevant is shaped by the social context). The social relevance of a university is thus understood as the degree to which it successfully copes with the various challenges and demands placed on it by the external environment and the internal needs of the university community. The stimuli from the external environment of the university can be broken down as follows:

a. *Stimuli from outside the academic system*: These are natural, environmental, political, social, economic, technological, cultural, and ethical stimuli that are scaled along a global-local continuum,
b. *Stimuli within the academic system*: These involve its norms, values, priorities, and evaluation criteria.

Such a broadly defined concept requires refinement of its dimensions to identify the target segments to which the relevance will relate. Studies that have addressed the social relevance of scientific disciplines can be used as inspiration (e.g., Dear, 1999; Matlovič & Matlovičová, 2012; Staeheli & Mitchell, 2005). One valuable impetus is the special report by Boyer (1990, p. xii), who distinguished four perspectives of academic and creative activity (i.e., discovering, integrating, applying, and learning). Based on these studies, four dimensions of the social relevance of a university can be identified: the heuristic, application, educational, and ethical dimensions. An authentic university must achieve social relevance in all four of these dimensions. Having any dimensions are absent means it is a different type of higher education institution (e.g., vocational college). Being aware of the relationship these dimensions have to

academic (classical) and entrepreneurial principles is essential (Matlovič, 2014).

The heuristic dimension is closely related to a university's mission as a blue-skies research institution. It is the sphere of the dominance of academic principles. A university must be a bearer of heuristic potential in the synergy of the efforts of its staff and students, and thus be able to produce and bring new knowledge and enrich general scientific and human knowledge. Indicators of a university's success in this dimension are discoveries; blue-skies research outputs; high-quality publications in reputable journals and publishing houses; publications in scientific journals and other publications, lectures, posters, and papers at international congresses, conferences, and symposia; citations and responses; success in obtaining grant projects; the amount of funding received from various grant schemes supporting blue-skies research; the availability of quality and certified research infrastructure; the reputation of the university; recognition; and awards of staff and students in the academic environment for their contribution to the field of science. In a small country, however, peer review by an international panel of experts should play the most critical role rather than evidencing scientometric indicators in assessing heuristic relevance (Matlovič, 2014).

The application dimension relates to a university's mission as an applied research and development institution. This dimension involves the sphere of the dominance of entrepreneurial principles. A university should be able through the synergy of the efforts of its staff and students to transfer the acquired knowledge into a usable form in the relevant sectors of production and social practice. Indicators of success are patents, utility models, new methodologies, technologies and products, practice-based orders, success in obtaining an inflow of funds from business entities and other non-academic actors and various grant schemes supporting applied research, the development and strengthening of science and technology incubators and parks, the establishment of start-up and spin-off companies, the reputation of the university, and the recognition and appreciation of staff and students by the business and social environment and the wider public. In this case, a pragmatic approach is required (Matlovič, 2014).

The moral dimension is related to the fulfillment of the so-called third mission of universities, by which we in particular mean their social responsibility, which includes a commitment to their active participation in the promotion of values in order to improve the current state of the world at different scales regarding the global-local continuum. In our

view, this should be an effort to achieve economically and environmentally sustainable and socio-spatially inclusive development, underpinned by the preservation of the natural environment, and cultural heritage, and adherence to ethical principles, democracy, humanism, and tolerance. In synergy with the efforts of its staff and students, a university should be able to express itself on socially relevant topics and problems, generate new themes, highlight undesirable developments, and offer intelligent solutions to problems. The fulfillment of this mission requires full autonomy and thus involves the domain of academic principles. The inappropriate subordination of universities to the interests of political power or the economic interest of the commercial sphere severely limits the possibilities for universities to solve societal problems. The current global community needs the kind of institution that can offer solutions with some critical distance and insight that are not beholden to any interest group. Therefore, protecting academic freedoms and autonomy is a priority task for universities. On the other hand, this requires the utmost responsibility on the part of universities regarding how they handle autonomy. University communities must have effective mechanisms for addressing any singular failures, particularly regarding professional rigor, research ethics, and educational activities. Universities must demonstrate credibly that they can address these issues within their own remittance and draw appropriate consequences for failures. Public trust is a crucial prerequisite for maintaining academic autonomy. Universities should be as open as possible to their surroundings and not act as ivory towers. Universities should foster a high culture of interpersonal relations and adherence to academic ethics and etiquette. With these attributes, universities should also provide desirable models of academically refined behavior for other areas of social life. The moral dimension of social relevance also includes universities' co-responsibility for local and regional development. A prerequisite is the creation of an atmosphere of trust and the establishment of a network of partnerships with public administrations, businesses, non-governmental organizations, churches, and other relevant stakeholders. A very effective tool for building trust is the implementation of internal quality assurance systems that involve all relevant stakeholders, including academic staff, students, and employers (Matlovič, 2014).

Current Challenges to and Changes in Slovakia's Higher Education Sector

The international context of the functioning of higher education in Slovakia results from its position within the European Higher Education Area and the European Research Area. Key stakeholders in Slovakia are aware of the need to reflect on the growing global interaction bringing convergent tendencies to national education policies. The OECD (2021) report "Improving Higher Education in the Slovak Republic" was prepared for this very purpose. The report includes an action plan consisting of 10 actions planned for the 2021–2024 period. Actions are grouped into three key areas: developing and implementing a coordinated higher education strategy, using funding to support and reward higher education performance, and enabling responsive institutional governance and management. The Slovak government has set priorities in its program for the period of 2020–2024 to increase the performance of Slovak universities; promote their diversification; and focus on inclusion, international cooperation, and collaboration with the private sector in order to contribute to reinforcing the quality of human capital, social inclusion, and the innovation potential of the Slovak Republic through increased economic competitiveness, economic growth, and sustainable jobs (Government of the Slovak Republic, 2021a). Another strategic document is the National Recovery and Resilience Plan of the Slovak Republic (NRRP), which was prepared in 2021 in the framework of the European Commission's Resilience and Recovery Facility (RRF). The NRRP is a financial instrument for supporting green and digital transformation and repairing the economic and social damage caused by the coronavirus pandemic. The NRRP has five main areas. Higher education is part of the Education Goal and Component 8 (i.e., improve universities' performance). Under this component, five reforms are being implemented: (a) reform of university financing including the introduction of performance contracts, (b) introduce a system of periodic evaluation of scientific performance, (c) form a new approach to accrediting higher education, (d) reform university governance, and (e) concentrate on excellent teaching and research capacities (Government of the Slovak Republic, 2021b).

These reforms are carried out through several instruments such as strategic planning, the Legal Framework Amendment, funding system changes, the introduction of a new accreditation system, and external

quality assurance for higher education. Strategic planning, the legal framework, and funding arrangements are the responsibility of the Ministry of Education, Science, Research, and Sport of the Slovak Republic (MERDS). Accreditation and external quality assurance for higher education is the responsibility of the Slovak Accreditation Agency for Higher Education (SAAHE), an independent public institution.

In recent years, several analyses and recommendations have been developed to improve the quality of higher education and research in Slovakia. At the same time, two larger student satisfaction survey projects have been carried out. This signals an increased interest of many actors (e.g., government, non-governmental sector, employers, students) to participate in improving higher education. Implementing the recommendations encounters discontinuities caused by frequent changes of ministers responsible for education management. The lack of coordination among the measures and policies that have been adopted is also a sign of weakness, given that the management of higher education institutions has been influenced by several departments of the MERDS and the Prime Minister's Office over the last three years.

The most profound reform of the higher education system that has been implemented in Slovakia in recent years has been the reform of accreditation and quality assurance for higher education. These resulted from the conclusions of the strategic document "*Učiace sa Slovensko*" [Slovakia Learns], which was prepared in 2017 by a team of experts commissioned by MERDS. This document pointed to the improper setup of the accreditation system, which the Slovak Accreditation Commission had provided as an advisory body to the government and which had resulted in the final accreditation decisions being taken not by the Commission but by the minister. This setup resulted in the Accreditation Commission failing to obtain full membership in the European Association for Quality Assurance in Higher Education (ENQA). For these reasons, a particular Act on Quality Assurance in Higher Education was adopted in 2018, which led to the establishment of the independent Slovak Accreditation Agency for Higher Education in 2019. The reform adopted the ESG 2015 principles (i.e., Standards and Guidelines for Quality Assurance in the European Higher Education Area) as its basis. Primary responsibility for quality assurance in higher education was given to universities and other higher education institutions, and these were required to develop appropriate internal quality assurance systems. The Slovak Accreditation Agency for Higher Education (SAAHE) became

responsible for external quality assurance. Its role was to set standards for the internal system and standards for the study programs. The essential elements became student-centered learning and the involvement of internal and external stakeholders in all levels of higher education quality assurance processes. The main aim of the reform is to give universities more flexibility in designing and delivering study programs to meet the needs and expectations of different stakeholders, including students and employers. SAAHE published the new standards in 2020, and higher education institutions were given two years to comply with the new requirements.

SAAHE conducted a large-scale student satisfaction survey titled Academic Quarterly in 2021, in which almost 20,000 respondents participated (i.e., 16% of the students from Slovak's first and second-cycle study programs). Its results were presented in a comprehensive thematic report (SAAHE, 2022). The survey results have provided valuable input to universities for their internal strategies to optimize how they deliver their curricula. SAAHE also considers the survey findings in its ongoing assessment of internal quality assurance systems for higher education.

Significant changes in the study program offerings have already been registered during this period. Within these changes, emphasis has been placed on the rigorous implementation of the student-centered learning paradigm, the involvement of all stakeholders in curriculum design and approval, and digital and green innovation of curriculum delivery accelerated in the context of the coronavirus pandemic. The main objective has been to innovate study programs by replacing the fragmented structure of narrowly specialized study programs with a new offer of more robust study programs that have the potential to increase their graduates' flexibility of application to the labor market and to increase the attractiveness of Slovak universities in the international context. Universities have responded by significantly consolidating their study programs and adapting their internal quality assurance systems. Existing study programs have been adapted to ensure the development of their graduates' vital transversal skills and attitudes (SAAHE, 2021). All universities in Slovakia have requested SAAHE to assess the compliance of internal systems and their implementation in terms of their standards. The results of this assessment are expected in the first quarter of 2024.

SAAHE is continuously paying attention to the emerging challenges facing higher education. At the turn of 2022 and 2023, discussions emerged about the impact of AI-based tools (in particular ChatGPT) on

higher education. SAAHE has taken a position and made recommendations on this issue, which it has communicated to universities and the wider public. In this regard, SAAHE sees the new options as an opportunity rather than a threat and has recommended that universities adopt an open attitude toward them and focus on their meaningful integration into educational and other creative activities. SAAHE does not recommend banning the use of these tools across the board. Colleges should make appropriate adjustments to validate learning outcomes (i.e., on examinations and defending independent work so that they reliably test students' knowledge, skills, and professional competencies). According to SAAHE (2023), AI-based tools should be used judiciously with an awareness of their limitations and potential negative impacts.

SAAHE has also urged colleges to put in place internal quality assurance systems to regulate the use of AI, with an emphasis on maintaining academic integrity. According to SAAHE, AI and its use are an impetus for innovation in the context of higher education. Higher education institutions should be able to prepare students for the future use of these new technological tools appropriately in all fields of study (SAAHE, 2023).

The most recent legislative amendments in 2022 have aimed to strengthen the external elements' position in the governance of higher education institutions. The powers of the Board of Trustees have been strengthened, which, among other things, has been allowed to participate in the election of the Rector together with the Academic Senate. The position of faculties has been weakened, and they have lost the self-governing status guaranteed by law. As a result, higher education institutions have been given greater freedom to regulate their internal governance systems. The conditions for filling the posts of professors and associate professors have also been changed. They have been separated from the state administrative awarding of titles, which had been retained out of respect for the Central European academic heritage but without any real practical implication. The aim is to open up universities more significantly in relation to the recruitment of teachers from abroad or from practice.

A persistent challenge in Slovakia has been the need to support the diversification of universities according to their mission, specialization, and study program offerings. Short tertiary programs and microcredentials still need to be delivered in Slovakia. The Slovak higher education system is also characterized by a higher proportion of second-cycle graduates compared to other countries (OECD, 2021). Therefore,

MERDS has announced several strategic plans in support of the emphasis on the missions and profiles of higher education institutions. In research-oriented universities, MERDS intends to promote quality research and the comprehensive delivery of study programs at all three levels. In particular, MERDS envisages promoting the concentration of currently dispersed capacities and encouraging strategic internationalization activities. MERDS also intends to support extending the offer to include vocationally oriented study programs, micro-credentials, and short cycles. These should be the domain of regionally rooted higher education institutions that deliver professionally oriented study programs, applied research, and third missions relevant to the sector and region (MERDS, 2023).

The strategic objectives for the near future consider changes in the system of financing public universities. The uniform performance-based model applied so far has stimulated universities to behave uniformly and has not allowed for diversifying strategic goals or emphasis on their governance and mission. This has led to a drive for similar approaches to scientific and research activities and curriculum profiling. Therefore, universities do not have the opportunity to choose a strategic line appropriate for them to demonstrate excellence. Less consideration was given to the contributions of universities regarding their third mission. Strategic thinking is therefore directed toward adjusting the methodology for financing universities to respect the strategic emphases in their profiling. Performance contracts will become an important instrument that include measurable indicators of the specific performances to which universities will commit themselves (MERDS, 2023).

Another identified challenge for the Slovak higher education sector is the overly fragmented institutional network, a relatively high degree of dispersion of research capacity, and the provision of doctoral study programs. This problem is addressed in Slovakia's National Recovery and Resilience Plan. Slovakia has committed to supporting merging universities into larger entities or consortia that will withstand international competition while creating a competitive and diversified internal environment (Ministry of Finance, 2021).

Last but not least, promoting inclusive approaches regarding the delivery of higher education as well as promoting open science and open education are also seen as essential objectives in the current strategic thinking of the responsible stakeholders in Slovakia (MERDS, 2023).

Conclusion

This paper has provided a description and analysis of higher educational issues concerning Slovakia. Slovakia faces a middle-income trap and a brain drain of elite and spirited students. One observes a general societal appeal not only to carry the economic development to higher standards (i.e., converge with the Western European economic level) but also to increase the standards for higher education. This paper reflects these issues from the angle of higher education.

The paper began with a short historical presentation of higher educational institutions. We continued with a general description and analytical remarks concerning the prevailing situation in the Slovak higher educational system. We have shown how the character of education changed after the breakup of socialism and the emergence of an independent Slovak Republic. For example, the number of students, universities, and other higher education institutions significantly increased over the last 30 years. Higher education had lost its elite character once it became more widespread. This had several positive consequences but negatively affected the quality of higher education. Consequently, many Slovak students opted to study outside Slovakia in neighboring countries' higher educational institutions.

Another significant change in higher education after 1993 was the substantial increase in students being interested in subjects not offered under the socialist regime, such as management, economics, political science, public policy, and social work, However, most of these disciplines were offered at low levels of quality. On the other hand, students' interest in natural and technical sciences decreased relatively. This created a mismatch between what the universities provided and what Slovakia's domestic and international industries required.

The next section attempted to map the Slovak authorities' responses to these developments and provided greater analytical insights into the Slovak higher education system. The last section discussed universities' place and identity in modern Slovakia. We have presented a theoretical framework for a socially relevant university and followed this with a presentation of the current challenges and recent changes in the higher education sector in Slovakia.

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War and Modernization in Ukraine: A Comparative Study of Systemic Education Reforms

Wojciech Siegień

Setting the Field of Analysis

After the collapse of the Soviet Union in 1991, Ukraine for the first time became a fully-fledged sovereign state in the modern sense (I omit here the short-lived Ukrainian state entities created at the beginning of the twentieth century such as the Ukrainian People's Republic or the Hetmanate; Plokhy, 2015). From the very beginning when Leonid Kravchuk was appointed president, Ukraine has chosen the path of democratization with an elected parliament and president. Despite the high level of corruption and the associated oligarchization of Ukraine's political and business elites, the country managed over the following decades to maintain democratic institutions with a vibrant political life and viable elections (Klimina, 2015). In subsequent elections up until 2014 and the outbreak of the Revolution of Dignity, Ukrainian authority had a changing character: Different political groups representing different interests as well as different ideologies were coming to power. On one hand, pro-Russian forces were present in terms of the Russian-speaking voters

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from eastern and southern Ukraine where heavy industry and mining are concentrated. On the other hand, pro-Western and pro-European forces were found mainly from the central and western regions who saw Ukraine's future exclusively in terms of integrating into the structures of the European Union. However, one can argue that 2014 was a turning point for Ukraine's entire political system (Leshchenko, 2015). This was because the Revolution of Dignity, the flight of President Viktor Yanukovych, and the Russian Federation's invasion of Crimea and the Donbas had both symbolically and realistically ended this kind of ideological competition (Hrytsak, 2015). Since then, pro-Western electoral orientations began to dominate in the war-torn Ukraine, and pro-Russian forces have been outlawed over time. As of 2023, the support for having Ukrainians join the European Union reached 83%, with only 3% opposed (Rating Group, 2023).

Thus, 2014 was a time caesura that divided two different periods in Ukraine's history, as well as two different developmental trajectories of the state and society as a consequence. I will therefore take 2014 as the dividing point of my analysis and focus on education as one of the most important areas and examples over which the two trends can be compared. I will consider the extent to which the reforms in the education system correlated with or were a result of the more general political trends of the respective sides. I will then consider the differences between the educational policy that was pursued during the transition and after the outbreak of Russian aggression, by which I mean the defined directions, goals, and anticipated effects of the educational reforms. All these questions are meant to answer the more general question of how significant the war was in terms of the modernization tendencies in Ukraine.

Resentment Versus Narrative Nationalization

The starting point of my comparative analysis will be to refer to the process of political transformation after the collapse of the Soviet Union in an educational context. For most of the Eastern Bloc states, this primarily meant two things: democratization and the sovereigntization of education. One area where these processes could be observed was in the educational historical policy of the young states. This was also the case in Ukraine, where these phenomena had begun back in the late 1980s. Georgiy Kasyanov (2018, p. 204) called this the "nationalization of the past" as a natural consequence of gaining independence and therefore

involves the definition and adoption of certain elements of the past by a given community (civic or national), as well as a process of combining the isolated elements into a single grand narrative (Kuzio, 2016). The result of this process then becomes the nationalization of the grand narrative by the state as representative of the citizens. The fact that perhaps the most important field in which the nationalization of the official narrative was realized has been the field of education is important to emphasize, especially its elements that refer to historical memory and therefore the mother tongue. This is because, as in the case of Ukraine, the overriding aim of the transformation was to transform a non-historical nation devoid of any sovereign narrative about itself into a historical nation (i.e., one that becomes not an object but a subject of history). This is what happened in the late 1980s when the historical discourse of nation and state as a regional variant of the so-called Soviet man began to be transformed into a nationalized discourse in Ukraine. Kasyanov (2018, p. 207) noted that Ukrainian universities didn't even have separate faculties for Ukrainian history back in 1990.

The two decades following its independence, however, were not a triumph of nationalized consciousness in Ukraine, not even in the educational space. This was the period that outlined the ideological conflict that had defined social life in Ukraine until 2014, which I mentioned at the beginning of the article. This was because nationalist tendencies in education were opposed by the Soviet-nostalgic tendencies (i.e., those rooted in post-Soviet resentment and represented in social and political life by people associated with post-communist circles). The first clear breakthrough in this ideological confrontation occurred in 2003, one year before the Orange Revolution that brought Viktor Yushchenko, who was considered a pro-European democrat, to power. An example of such a shift can be seen regarding the issue of the state-level commemoration of the Holodomor (Applebaum-Sikorska, 2017), which was only officially recognized as genocide in 2003 (Graziosi, 2004; Kasyanov, 2019, pp. 413–428; Kravchenko, 2015).

Reforms of the Education System in the Transition Period

Referring directly to the education system and the relevant legislation, these can be said unequivocally to have been subject to continuous reforms over the last 30 years without producing the expected results

(Novakova, 2017). The directions of the reforms should be emphasized as being in line with the ideological orientations of the reformers and thus to have differed, sometimes significantly, over the years. The new Educational Framework Law was enacted on April 25, 1991 while Ukraine was still formally part of the Soviet Union. As an indication of the importance that members of the Verkhovna Rada attached to the renewal of education, the document defined the main goals as achieving a high degree of national self-identification. Subsequent legislative regulations emphasized the need for national rebirth and the reconstruction of Ukrainian statehood. Already at the beginning of the journey toward independence and democracy, the achievement of the envisaged goals under these new conditions was realized, at least at the declarative level, to depend first and foremost on the construction of a modern national system of education (Gavrilenko, 2021).

The Crisis of Finance and Optimization in Education

The 1990s were a time of deep crisis in Ukraine's transformation, one which took its toll on education. The need to seek savings, which was called optimization, resulted in a decline in the number of schools, teachers, and, in subsequent years, students themselves. For example, at the beginning of the 1990s, Ukraine had more than 22,000 general secondary schools. More than 20 years later, it only had 14,900 (Samohin, 2014). However, this may have been due to a large decrease in the number of students, going from about 7 million after independence to 4.2 million in the 2020–2021 school year (Gavrilenko, 2021). In any case, a crisis had begun with the education system reforms that led to the state becoming largely indebted to educators; consequently, a decrease occurred in the prestige of the profession, followed by an exodus of qualified staff. The 1990s were also associated with frequent strikes by employees in the educational sphere. In such a case, a growing gap occurred between the declarations of successive governments and the actual situation in schools. In 1996, the government adopted the Education Law, which stated that education should be a central part of the Ukrainian economy. This was to be ensured by the provision to allocate 10% of the gross domestic product (GDP) to education (Chernina, 2017). However, this level of spending on education was never achieved in Ukraine. Rather, it declined throughout the 1990s from 5.6% of GDP to 4.3% in 1999, despite oligarchic fortunes growing at the same

time. The situation seemed like it would improve with the recovery from the crisis in the first years of the twenty-first century. Data from the Organisation for Economic Co-operation and Development (OECD) even indicated the percentage of GDP allocated to education in 2009 to have been 8.2% (Bashko, 2016). Unfortunately, with the onset of Russian aggression in 2014, the situation took a turn for the worse, with this indicator falling by almost 2% in the following years. In addition, this indicator doesn't accurately reflect the structure of the state's educational expenditures. Most of these funds went not for development investments but to provide teachers' salaries (i.e., more was given to maintain the systemic status quo).

The Crazy Run of Reforms

The first decade of the twenty-first century was a turbulent time for Ukrainian education and was associated with tectonic shifts correlated with political changes, namely whichever political orientation happened to be in power. Ukraine entered the twenty-first century with a pro-Russian government. The political course of the country only slowly turned toward the West with the events of 2004 (i.e., the Orange Revolution).

The main motivation behind the education reforms the various governments at the time introduced was to combat the most serious disease in Ukrainian social life: corruption. The introduced changes were therefore aimed at objectivizing the assessment process. Significantly, some of the changes introduced after 2004 (i.e., after the Orange Revolution) had resulted from the course adopted for integrating into the structures of the European Union. They were therefore a derivative of the ideological orientation of the pro-democratic elites in power at the time. These changes occurred one after the other. In 2001, the Ministry of Education introduced a 12-point grading system for students. The ministry's reasoning behind the introduction of this change is interesting, as it didn't only specify the change to be precisely about objectivizing the assessment process. Another argument referred to a change in the philosophy of assessment in general directly related to the departure from post-Soviet patterns. Namely, the new grading system required teachers to focus not on students' failures (as had been the case in the old four-point system) but on their level of achievement (Gavrilenko, 2021). This also meant a

change in the definition of teachers' roles, as well as a change in the definition of students themself. In short, a shift can be said to have occurred from thinking in terms of punishment to thinking in terms of support.

Further changes followed practically year after year. In 2002, a 12-year teaching cycle was introduced. The argument here again was to focus on the students, who were being given more time to master difficult material (the reform was reversed in 2010 after pro-Russian forces came to power). Another change occurred in 2003 with the introduction of the provided educational services being licensed. A major structural change again took place when Ukraine joined the Bologna Process in 2005. Of course, this brought Ukrainian universities closer to European ones and had been a result of the orientation chosen by the democratic political forces of the time toward integrating into the EU structures. An important argument for joining the Bologna Process was also a civilizational one that emphasized belonging to the Western world.

Another profound systemic reform took place in the first decade of the twenty-first century. In 2008, a procedure called the External Independent Assessment (EIA) was introduced as a condition for admission to all higher education institutions in the country (Supreme Council of Ukraine, 2007). From that year onwards, an external examination regarding specific subjects had to be passed in order to enter a university. The result of the exam allowed admission to a specific higher education institution. In the case of this reform, a combination of arguments was also found referring to pro-European aspirations. On one hand, the centralization and removal of entrance examinations from the competence of the committees of individual universities had become part of the fight against corruption in education. On the other hand, the discussions about the EIA emphasized that work on the procedure was to be carried out with the participation of NGOs and Western partners. Undeniably, the procedure was also part of Ukraine's pre-2014 pro-European developmental trajectory.

In conclusion, Ukraine can be said to have been dealing until 2014 with reform efforts of successive governments that had no clear directions, and these efforts did not constitute any unified coherent strategy for transforming Ukraine's education system. The reason for this was the post-communist legacy that was present in the form of high levels of corruption and extreme underfunding of the system. Alongside natural demographic processes, this necessitated a radical slimming down of the school network (Romaniuk & Gladun, 2015). Throughout the first

decade of transition, therefore, Ukraine at best was dealing with efforts to preserve the status quo. The watershed moments during this time were correlated with political events such as the Orange Revolution of 2004, the result of which saw pro-democratic forces being able to bring Ukraine into the Bologna Process and to have assessment objectivized at the central level. Each of these changes was presented not only as a reform measure but also as a civilizational choice that turned Ukraine toward the West, thus breaking with its subordinate position toward a hegemonic Russia.

War and Changes in Education After 2014

As stated earlier, 2014 and the onset of Russian aggression against Ukraine represents a time caesura and marks a decisive change with Ukraine's education system. This is linked to the political changes in the following years, the most important of which is the consistent removal of openly pro-Russian forces from the political space. At the same time, the Russian attack on Ukraine broke the long-standing balance of supporters and opponents of integration with EU states in favor of those supporting EU and NATO accession.

Every moment of historical shift is conducive to leading radical change (Minakov, 2018). In the case of the education system, this took place on many levels. Ukraine's deep financial problems, together with the authorities' declared need to ensure a high equal level of education, were an argument for the liquidation of schools with small numbers of pupils that were generally located in small towns or villages. Pure neo-capitalist logic was at work here. In 2017, educating one pupil cost the budget 9,600 Ukrainian hryvnia. However, in rural schools scattered in the remote regions of the country, this cost could be as high as 20,000–60,000 hryvnia (Chernina, 2017). The state therefore proposed a solution by creating a system of supporting schools (Ministry of Education and Science of Ukraine [MON], 2022). These are the schools that are considered to be the best in each region with larger numbers of pupils. They will be provided with better technical and teaching facilities and tasked with taking over the pupils from the smaller schools that are closing down. The project would provide free transport for children from closed schools to supporting schools. As a result, almost 1,400 schools were closed in the country from 2014–2018. As expected, this resulted in an increase in the number of pupils in the supporting schools, thus putting a strain on

teaching staff. In smaller schools, this took on paradoxical forms, where a teacher of mathematics for example would have to act as a physical education teacher at the same time. Such burdens created a shortage of teachers in remote schools, which then became another argument for their closure (Kurovs'ka & Mulavka, 2018).

Similar changes were only a prelude to much deeper transformations of the entire Ukrainian education system. These changes need to be mentioned as being part of a more general transformation of the country as a result of the war. I am referring to the process of the decentralization of Ukraine that had started under the presidency of Petro Poroshenko, namely a reorganization in which many decision-making, as well as financing processes, would be transferred from the center to successively lower levels of local authority. This decentralization was one of the elements in the cardinal reform of the entire state and was designed to bring it closer to the standards and practices of European democratic states. The most profound educational change in Ukraine is associated with the initiation of the New Ukrainian School (NUS) reform in 2016. In a nutshell, the creators of this reform can be said to have intended it to shift the system to a completely new trajectory involving not just the acquisition of knowledge, school autonomy, and motivated teachers but also being student-focused with a partnership pedagogy, as well as oriented toward the pragmatic side of knowledge and competence. The NUS project concretely defines the profile of new students as the product of the school. Students are conscious Ukrainians, comprehensively developed and responsible citizens and patriots who are not afraid to take risks and therefore to look for new solutions. Students are critical and deeply moral people who respect human rights (NUS, 2017).

The first test of the effectiveness of the NUS reform was indeed global and linked to the outbreak of the COVID-19 pandemic. In the Ukrainian context, the lock-down-induced changes, unprecedented for a modern global reality, were superimposed tectonically on the social changes that the warfare had caused. As a result of the piling up of crises in Ukraine, ensuring the continuity of schooling among Ukrainian children and youth became crucial. The local needs of Ukrainian society immediately began to dovetail closely with the global agenda articulated in the United Nations Children's Fund (UNICEF) documents, in particular, the "Every Child Learns: UNICEF Education Strategy 2019–2030" (UNICEF, 2019). Of the three main goals of this strategy (i.e., equitable access to learning opportunities, improved learning and skills for all, and

improved learning in emergencies and fragile contexts), equalizing access to education and improving learning conditions in a crisis situation, such as warfare or occupation undoubtedly, proved to be unexpectedly relevant for Ukraine. UNICEF data at the beginning of 2023 indicated that warfare had a traumatizing impact on 5.7 million Ukrainian school-aged children. The scale of the crisis is so great that effective aid must be coordinated and delivered from an international level. In the case of UNICEF, it was dealing from the outset with not only activities in Ukraine itself but also in the neighboring countries that had taken on the main burden of hosting and caring for war refugees. A strategy combining traditional approaches with high-tech solutions was therefore chosen, as this was the only way to reach the largest group of children both in Ukraine itself and those who'd been displaced. In concrete terms, this meant that support had been started to promote access to formal and non-formal education in the country and in places where this was possible by providing the necessary educational materials and Internet access, as well as psychological support for both children and young people and also the education staff (UNICEF, 2023). The activities implemented in neighboring countries had a slightly different nature, as they namely focused on contacting local educational institutions in order to help integrate Ukrainian children and youth into the local educational conditions that differed from their native ones, hence causing particular adaptation problems (e.g., language, curriculum differences, integration, intolerance).

Concrete examples of the implementation of the described strategies that were coordinated internationally but implemented locally can be clearly seen in the field of distance learning. Since the beginning of the Russian aggression, the Ukrainian Ministry of Education and Science has identified prioritizing the creation of opportunities to keep Ukrainian students in contact with the state education system, especially the teaching of the Ukrainian language, history, and literature, as these are subject areas that cannot be full if at all implemented when displaced students are in a non-Ukrainian educational system (MON, 2022). Such contact is also necessary for being able to obtain official documents certifying the attainment of particular educational degrees. One tool for realizing such defined goals is the All-Ukrainian Online School (*Всеукраїнська школа онлайн*) at e-school.net.uae-school.net.ua. This is actually an educational platform designed for the remote education of pupils from Grades 5–11, and also offers methodological support to teachers. The objectives for creating this platform fully reflect UNICEF's goals of providing

every Ukrainian child and teacher with equal, free, and safe access to quality educational content. Interestingly, the example of this platform illustrates well the importance of the experience of fighting a pandemic in the educational system's continued struggle with the effects of war. Indeed, the project started its operation during the pandemic, but as a result of the openly aggressive warfare by the Russian Federation, it has become a ready-made tool that can be used to continue teaching under warfare conditions. Moreover, the project is a good example of cooperation between governmental and non-governmental institutions both in Ukraine and abroad. Indeed, while the educational materials on the platform are in line with MON's official recommendations and have been certified by the Ukrainian Institute for the Development of Education, they were realized by the non-governmental organization Osvitoria with the financial support of the Swiss-Ukrainian Decentralization for Improved Democratic Education (DECIDE) project and with the substantive support of UNICEF. DECIDE is thus a model example of cooperation between national structures and international institutions pursuing global goals while also assisting Ukraine's systemic transformation to European standards with regard to such aspects as decentralization.

Importance is had in mentioning that this is just one of many examples of cooperation where national educational policy goals have interacted and been realized with Ukraine's global partners. One example worth mentioning is the World Bank's Human Capital Project (World Bank, 2021), which aims to promote investment in human capital and increase equal opportunities. Here again, the pandemic experience has proven to be an important impetus by forcing global questions about the meaning of investment in human capital. In Ukraine, the war activities have added a specific context for these global goals and been implemented in the form of Ukrainian Educational Hubs. The aim of these hubs is primarily to organize catch-up classes so that learners can fill in the gaps in their education, as well as to organize basic skills courses on soft skills, psychological support, language learning, information technology (IT), and health education. Similar to the previously described project, all of these have been approved by MON and made available online for anyone interested in improving their competences in the form of continuing education.

The example of the above projects alone clearly shows how the process of transforming the education system in Ukraine is strongly coupled with international development initiatives. Most of the comprehensive

innovative solutions in the field of education and those designed to help overcome the consequences of the war have been implemented in close cooperation between the international organizations and the official governmental institutions and non-governmental organizations from Ukraine. The specifics of the conflict in Ukraine (i.e., the massive internal displacement and refugee movement to European Union countries) have evidently resulted in a preference for remote education innovations. In this sense, the paradoxical positive impact can be observed from the pandemic experience that inculcated the basic practices of remote learning and provided the opportunity to build the digital foundations of educational platforms in Ukraine that have proven essential after 2022.

Cases Regarding the Implementation of New Strategies

The NUS reform proposed a number of changes for implementing the strategic objectives of the reform. This section will now look at the most significant changes that demonstrate the depth of the reforms and their fundamentally new dimension.

Patriotism

I would like to draw attention to the aspects of the project's assumptions related to patriotism. The project planned to allocate as many as five lesson hours to the topic of "Defense of the Homeland" that was based on the subject with the same name and introduced back in 2015. It involves lessons on patriotic education that are compulsory for students in Grades 10–11. If one looks at the recommendations for the subject, one can say that patriotism is boiled down to preparing young people for the military. The assumption is that students would be given knowledge of the structure of the Ukrainian army, taught how to use weapons, and gain knowledge about self-defense techniques and first aid. However, the practice of implementing this subject in schools has shown another interesting regularity. A change occurred in 2020 regarding the name of the subject, going from "Defense of the Homeland" to "Defense of Ukraine" (MON, 2020). Upon looking at the ministerial reasoning behind this change, Minister of Education and Science Hanna Novosad is seen to have stated this change to be a break from the Soviet paradigm in Ukrainian education. This is because the old name had been inherited from the Soviet era. Six years after the start of the war and 29 years after the collapse of the Soviet Union, Ukraine can be said to still be dealing with a process of

sovereigntization of education, which is understood as a move from the Soviet-nostalgic narratives to national narratives. The rupture took place in the rhetorical field, which underscores the vitality of the long-standing authoritarian narrative patterns.

Competing Learning Cycles

With these reform assumptions in mind, this section will now look at their ideological entanglements by using the example of the changes related to the compulsory education cycles. As I wrote earlier, the reform in 2000 had resulted in a shift from an 11-year teaching cycle inherited from communism to a 12-year cycle. This had caused dissatisfaction in general, partly due to resentment, the unpreparedness of the reform, and parental calculations, suggesting that a shorter cycle would allow children to move on to tertiary education sooner and thus consequently enter the labor market sooner. Interestingly, after the pro-Russian post-communist forces came to power, the Soviet model was reverted to in 2010 under President Viktor Yanukovych. The length of schooling turned out to be indicative of the support for the developmental direction of the country as a whole. When being uprooted, the 11-year cycle had been supported by people burdened by post-communist resentment, while those supporting the 12-year cycle expressed their pro-European convictions. When work on the NUS reform was underway in 15 regions of the country in 2015, the Democratic Initiatives Foundation and the Ukrainian Sociology Service had already conducted a survey on attitudes toward the 12-year cycle. According to the results, 70% of the questioned parents and 68% of educators were against this cycle being introduced (Osvita, 2015). What is interesting in this case is the arguments on the other side that had proposed the change. The 12-year cycle implies the adoption of European quality standards and is therefore more or less nothing but another step toward EU integration. The opposite side of this argument concerns the post-Soviet system that was in force at the time in countries such as Russia, Belarus, and Armenia. To break away from it was to sever further ties with post-Soviet countries and therefore was a civilizational choice. Therefore, regardless of the low support, the creators of the reform unsurprisingly had introduced an extended learning cycle in 2018 because they were indeed pursuing civilizational goals.

Teaching the Mother Tongue

The latest example of a shift in the state's education policy would be one of the most controversial provisions of the reform that came into force in 2017. It concerned the provisions related to teaching in the languages of national minorities living in Ukraine, especially Paragraph 7 of the reform titled "Language of Education." It states that the language of instruction in Ukraine is the state language (i.e., Ukrainian). At the same time, people belonging to national minorities were guaranteed the right to learn their own language. Their language could also be the language of instruction alongside Ukrainian but in separate classes or groups at the level of pre-school and early childhood education (Grades 1–4). The indigenous peoples of Ukraine, the Crimean Tatars, the Karaites, and the Gagauz retained the right to full education in their own language.

Perhaps the most important provision of the law from the point of view of the controversy it has caused is that, regarding the educational institutions and in accordance with the adopted core curriculum, one or more disciplines may be taught in two or more languages (i.e., the state language, English, or another official EU language). The consequences of the provision are primarily twofold: on one hand, the statutory possibility of learning in a minority language is preserved; on the other, learning in Russian is excluded. This situation shows that the main intention of the legislator was primarily the gradual de-Russification of the educational system in Ukraine (i.e., the Ukrainianization of this system; Siegień, 2018).

Ukraine's attitude stems primarily from the Donbass experience, when the language problem was used as an instrument in confronting the weak Ukrainian state. Russia, wishing to strengthen separatist tendencies, reached for the demagogic argument of language discrimination. Indeed, the concept of *Russkiy Mir* [Russian world], which was an ideological screen for aggression in eastern Ukraine, was based on the argument of defending the Russian language and thus was a weaponization of the role of language (Ryazanova-Clarke, 2017). The issue of education in the mother tongue had thus been a kind of weapon in this war. Consequently, the gradual introduction of teaching in Ukrainian can be perceived as a defensive strategy. Let me add that this is a far overdue response from the Ukrainian state to the threat of separatism inspired from the east. Working on the language would then be a kind of ideological prevention that would be able to limit the reception of Russian propaganda. Thus, the war can be said to have been the result of the earlier absence of the

state and education in the Ukrainian language in the Donbass as well as other regions.

Conclusions

Regarding my research questions, I should state that 2014 can be considered a time caesura in the development of the education system in Ukraine. Over the last 30 years, the proposed and implemented changes have been closely correlated with the general political trends. Until 2014, Ukraine had been at a political crossroads, as the country's social and political life was dominated by the radically different competing policies: integrating into the European community and rapprochement with Russia. When combined with economic stagnation, this meant that most of the changes in the field of education were of a sham nature and aimed at maintaining the status quo. Significant reform impetuses at that time came from pro-European political forces, which led to the integration of the Ukrainian education system into the Bologna Process. This can be viewed not so much as a political but rather a civilizational choice. The need to defend this pro-European course was, among other things, behind the outbreak of the Revolution of Dignity in 2014. The main effect of the Revolution and consequently of the Russian-Ukrainian war was the adoption of strategic development assumptions, within whose framework one condition for integrating into EU structures was the decentralization of power and the decisive fight against corruption. In this context, a shift in education policy can be mentioned, as comprehensive and strategic changes had occurred within it for the first time, changes where the education reform was coherent and followed the generally accepted reform directions of the whole country. The culmination of this process has been the introduction of the New Ukrainian School (NUS) reform. Emphasizing the ideological dimension of these reforms is important. Patriotic education as an implementation of the sovereigntization of education and the unequivocal shift to teaching in the mother tongue are examples of the Ukrainianization of the education system, something which until the outbreak of war in 2014 had not been achieved since its independence. In this sense, a glaring example is seen of the modernizing effects of war (Bandura & Staguhn, 2023), with the outbreak of conflict forcing radical corrective steps to be taken in order to maintain the sustainability of the state system as it is.

One tragic test of the resilience of the system undergoing reform was the open aggression of the Russian Federation against Ukraine on February 24, 2022. As of January 2023, 1,259 schools (11% of all schools in the country) had been damaged as a result of hostilities, with 223 having been completely destroyed. Also, 13% of students have left the country and remained abroad. Teaching in the country was halted for a fortnight but resumed online or in places where certain conditions were able to be met (e.g., having a bomb shelter in the school). Currently, 36% of schools work in mixed mode (i.e., online/stationary), and another 36% work exclusively online (Kohut et al., 2023). While the central government creates a long-term plan for the reconstruction of the school network and plans to continue the implementation of the NUS reform, the regional authorities ensure that schools can work on a daily basis, coordinate assessment and ongoing repairs, and cooperate with international aid organizations. This means that the decentralization of power and the building of local structures has been successful because it has allowed a flexible response to war and a rapid return to an operational state even under conditions of warfare. Apart from local authorities, the most important element of the resilient response of Ukraine's education system has turned out to be the teachers themselves, who showed initiative under extreme conditions, continuing to teach in shelters without electricity or turning gas stations stocked with electricity generators into remote teaching hubs for students (Hook, 2023). Under conditions of war, the educational system and its participants have proven to be one of the most effective points of resistance in the fight against aggression.

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Curriculum and Teacher Training in the Context of 21st Century Skills and New Technologies

The Future of Education: AI-Supported Reforms in the USA and China

Erhan Dönmez

Introduction

The twenty-first century has seen an unparalleled surge in technological innovations that have disrupted and reshaped various sectors of society. Among these, artificial intelligence (AI) stands out as a particularly potent force with transformative implications across diverse fields including healthcare, transportation, finance, and, most notably, education (Berners-Lee, 2017). The influence of AI in the education sector has given rise to revolutionary pedagogical strategies and tools, propelling the world toward a future where education is increasingly personalized, adaptive, and data-driven (Bates & Galloway, 2012).

Emerging as a catalyst for education reform, AI has the potential to revolutionize teaching and learning processes. AI-empowered educational data mining and learning analytics techniques have started to provide educators with rich insights into student learning behaviors and preferences (Baker & Siemens, 2014). These data-driven insights can inform the design and delivery of instruction, tailoring it to individual student needs

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and thereby fostering an educational environment that is both inclusive and effective (Baker & Siemens, 2014).

Personalized learning experiences are adaptive to the individual needs of each student and underscore a revolutionary approach to education that is moving away from the one-size-fits-all model to one that caters to individual learning styles, abilities, and needs (Bates & Galloway, 2012). Intelligent tutoring systems and AI-powered platforms are providing individualized instruction at an unprecedented scale, facilitating effective learning at a student's own pace.

Moreover, AI's role in data analytics has far-reaching implications for enhancing educational practices and pedagogy. AI systems' ability to gather, analyze, and interpret vast amounts of educational data can provide valuable insights for instructional design and curriculum development (Baker & Siemens, 2014). These data-driven insights could be instrumental in identifying at-risk students, allowing for early interventions to support these students and improve their academic outcomes.

Even still, the integration of AI in education has not been merely limited to data analytics but also encompasses a broader spectrum of applications such as intelligent tutoring systems, adaptive learning platforms, automated assessment tools, and AI-powered educational hardware and software. Intelligent tutoring systems can provide one-on-one tutoring that dynamically adapts to a student's learning pace, while automated assessment tools can swiftly grade assignments and provide timely feedback, thereby increasing efficiency and effectiveness in education (Woolf, 2010).

Against this backdrop, several countries have begun to recognize the transformative potential of AI in education and are undertaking significant reforms to leverage its benefits. Notably, China and the United States of America (USA), two of the world's largest economies, have implemented robust AI-supported education reforms, demonstrating an ambitious vision for the future of education (Office of Educational Technology [OET], 2021).

China allocates significant financial resources to the AI sector and focuses a significant portion of these resources on educational technologies. According to one report:

> AI adoption in education will explode over the next five years, with global spending projected to exceed $6 billion by 2025. Much of the growth will come from China followed by the United States, with these two countries

> accounting for 100% of global AI education spending… It will create its reputation. (Kulkarni, 2019)

China's New Generation AI Education Innovation Action Plan and the USA's National Education Technology Plan are testaments to the countries' commitment to fostering AI-integrated educational systems. These strategic initiatives aim to harness the power of AI to improve educational quality, expand access to education, and promote personalized learning experiences (OET, 2021). Both countries also have made significant strides toward developing AI-powered educational hardware and software to support this endeavor.

Meanwhile, integrating AI into education brings forth a multitude of ethical considerations that must be addressed to ensure responsible and equitable practices. These considerations include data privacy and security, algorithmic transparency, and the potential risks of bias and discrimination (Floridi & Cowls, 2019). Safeguarding student rights and promoting inclusivity while harnessing the potential benefits of AI requires the establishment of robust regulatory frameworks and the development of ethical guidelines (European Commission, 2019; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020). These frameworks should encompass principles that prioritize privacy protection, promote transparency in AI decision-making processes, and mitigate the potential biases that can arise from AI algorithms (Floridi & Cowls, 2019). By navigating these ethical challenges, education systems can ensure that AI integration aligns with the values of fairness, equity, and respect for student autonomy.

This article provides an in-depth exploration of the AI-supported reforms in education in China and the USA. It examines the initiatives undertaken by both countries, the potential benefits and opportunities afforded by the integration of AI in educational settings, and the ethical considerations that must be addressed to ensure the responsible and equitable use of AI in education. In this exploration, this article draws upon diverse scholarly literature, including peer-reviewed journal articles, conference proceedings, and government reports.

AI-Supported Education Reforms in China

China is a nation recognized globally for its swift technological advancements and has displayed an unparalleled commitment to integrating AI into its education system. This drive is fundamentally embodied in the country's New Generation AI Education Innovation Action Plan, introduced by the Ministry of Education of the People's Republic of China (MOE, 2017). This landmark initiative underlines China's proactive approach toward leveraging AI to transform its educational landscape and establishes a roadmap for the country's pursuit of AI-enabled education reforms.

AI in education often begins by using diagnostic tests to determine a student's activities and level of knowledge. After this stage, the aim is to create a personalized curriculum for each student according to their specific needs. According to Derek Li (as cited in Kulkarni, 2019), founder of China-based education technology company Squirrel AI, the AI his companies use is capable of gaining more information about understanding students in three hours than the three years the best teachers require.

At the heart of China's AI-supported education reform lies the intent to improve educational quality while expanding access to education. By deploying AI technologies, China aspires to customize educational experiences to cater to the specific needs and preferences of individual students. The New Generation AI Education Innovation Action Plan also outlines an ambitious vision for the future of education in China, with AI positioned as a strategic tool to promote equity and inclusion in education.

The realization of this vision is evident in the development and implementation of various AI technologies in China's educational settings. These include intelligent tutoring systems, virtual classrooms, automated assessment tools, AI-powered educational hardware as well as software, such as smartboards and learning management systems. These AI-powered tools and systems work in unison to create a comprehensive AI-supported learning environment that supports student learning in a myriad of ways.

As one of the cornerstones of China's AI-driven education reforms, intelligent tutoring systems are designed to provide individualized instruction to students. These systems are engineered to adapt to a student's learning pace, thereby promoting a more personalized and effective

learning experience. Meanwhile, virtual classrooms leverage AI to create an immersive and interactive learning environment that transcends the boundaries of physical classrooms. Through virtual classrooms, students in remote or underserved regions can access high-quality education resources, underscoring China's commitment to expanding access to education.

At the same time, China has made significant strides in developing AI-powered educational hardware and software. Smartboards equipped with AI capabilities have been installed in many Chinese classrooms, transforming traditional teaching methods by enabling interactive and engaging lessons (Wang et al., 2021). Similarly, AI-powered learning management systems are increasingly being used to manage and streamline various aspects of educational administration, from curriculum planning to student performance tracking.

In China, many technology companies operate within AI-supported education. Offering these components often develops platforms designed for the purpose of personalized learning experiences. These platforms leverage AI techniques to determine knowledge levels and offer tailored solutions to enable learning. With government support, such practices also attract attention.

Education is deeply rooted in Chinese culture as one of the core values of society. A study detailed in the South China Morning Post (Kulkarni, 2019) found that, compared to the average income of families with preschool-aged children, these families spend 26% of their income on education. Likewise, the study emphasized that 20% of the income of families with children at the K-12 level is directed to education-related expenses. These findings can be considered a concrete indicator of the importance given to education in Chinese society.

Carnegie Mellon University and China-based education technology firm Yixue Education Inc. have launched a joint research initiative called the CMU-Squirrel AI Research Lab. The initiative focuses on AI, machine learning, cognitive science, and human–computer interface technologies with the aim of improving large-scale personalized educational experiences for K-12 students around the world. Yixue Education Inc. has opened more than 1700 AI-powered learning centers across China through its Squirrel AI Learning brand and has plans to open more centers in the future. This startup is just one example of the many EdTech companies in China (Kulkarni, 2019). Many different AI-supported training examples like this are found.

AI-powered education offers the potential to analyze student performance and create a curriculum to accordingly provide students with a more customized learning experience. This involves a strategy to optimize the learning process by identifying students' strengths and weaknesses. These initiatives aim to increase overall learning outcomes by focusing on individual students.

The two most important of these applications can be shown as Squirrel AI and ALO7. The reason why these applications are important is because these two companies compete with each other over AI applications. With a population of 1.4 billion in China, a competitive environment has emerged between two different approaches to AI in education: AI-led and AI-assisted.

In this competitive environment, no company can pioneer AI in education like Squirrel AI, which was founded in 2014. Squirrel AI claims to be the first AI-powered adaptive education provider in China (Technology Review, 2019). Squirrel AI collaborates with highly qualified teachers to break topics into the smallest blocks of conceptual material. For example, Squirrel AI breaks down middle school-level math into more than 10,000 points of knowledge. This level of detail is intended to allow Squirrel to more precisely diagnose students' knowledge gaps. Squirrel AI founder Derek Li envisions a model in which human teachers play a more passive role in the classroom. According to him, AI takes care of the actual teaching, while humans only step in when problems arise.

However, Squirrel AI is not the only player on the Chinese EdTech scene. ALO7 represents the other approach of AI-assisted education. Founder and CEO Pan Pengkai created an English learning platform using AI. Describing ALO7's approach, Karen Hao stated, "The knowledge learned through adaptive learning, which includes word disassembly, can be applied at home. Creativity skills, such as writing and speaking, are learned in the classroom" (Kulkarni, 2019). In this context, while Squirrel AI follows a targeting strategy to almost replace human teachers, ALO7 aims to assist them.

In conclusion, China's AI-supported education reforms represent a visionary and systematic approach to harnessing the potential of AI in education. From personalized learning experiences to efficient administrative processes, AI technologies have been instrumental in promoting educational quality, accessibility, and equity in China. As the country continues to advance its AI education initiatives, its experiences and

achievements serve as valuable insights for other nations embarking on similar paths toward AI-supported education reforms.

AI-Supported Education Reforms in the USA

Much like China, the USA has also embarked on a journey to reimagine the role of technology in education, with AI being at the forefront of this transformation. The country's vision for the future of education is articulated in the National Education Technology Plan (OET, 2021), which serves as the blueprint for the integration of AI technologies in American schools. By harnessing the power of AI, the USA aims to revolutionize its education system, making it more responsive to the needs of diverse learners and preparing them for a future increasingly mediated by AI and other emerging technologies.

AI-supported education reforms in the USA are characterized by a multi-faceted approach that involves leveraging AI technologies to enhance both teaching and learning practices. Key to these reforms is the development and adoption of adaptive learning platforms powered by AI algorithms that aim to personalize instruction based on individual student needs (Bates & Galloway, 2012). These platforms are designed to analyze student data and offer targeted recommendations and feedback, leading to improved learning outcomes (Craig et al., 2004).

One prominent example of such an adaptive learning platform in the USA is the DreamBox Learning Math program, which uses AI algorithms to adapt the learning content in real time based on each student's interactions within the program (Woolf, 2010). The program provides immediate feedback to students, enabling them to learn at their own pace and style. This form of AI-facilitated personalized learning underscores the USA's commitment to student-centered learning, with technology serving as a crucial tool for making instruction more responsive to individual learner needs.

Another critical aspect of the AI-supported education reforms in the USA is the use of AI-powered analytics tools that allow educators to draw valuable insights from educational data. These tools enable teachers and school administrators to make informed decisions and timely interventions based on data-driven insights (Bates & Galloway, 2012). For instance, platforms like BrightBytes harness machine learning algorithms to analyze multiple data points, providing educators with actionable insights into students' performances and needs.

Moreover, AI is also being leveraged to support teachers in their instructional practices. For instance, Intelligent Tutoring Systems (ITS) use AI to provide immediate feedback to students, saving teachers time and enhancing their efficiency (Koedinger et al., 2012). Tools like these not only enhance the efficiency of teaching but also free up teachers' time to engage in more student-centered teaching practices.

As AI's role in education continues to expand, so too do concerns about the ethical implications of its use. Like China, the USA acknowledges these concerns and emphasizes the need for safeguards to protect student data privacy and ensure the ethical use of AI in education (OTE, 2021). Key to these efforts is a commitment to transparency, fairness, and accountability in using AI in education, with a clear emphasis on ensuring that AI algorithms do not perpetuate bias or discrimination (Reich & Ruipérez-Valiente, 2019).

Furthermore, a growing awareness is found regarding the potential adverse impacts of AI, such as the risk of over-reliance on AI for instruction or assessment, which could compromise the human aspects of education. The potential for AI to exacerbate existing inequalities in education if not implemented equitably also occurs (Williamson et al., 2020). Recognizing these concerns, the USA has emphasized the need for a balanced and thoughtful approach to integrating AI into education, one that respects the human dimensions of teaching and learning while capitalizing on the benefits AI can offer.

In conclusion, the AI-supported education reforms in the USA reflect a future-oriented vision of education, one that acknowledges the transformative potential of AI and harnesses it to support student learning and teacher effectiveness. As these reforms unfold, ongoing discussions on the ethical implications of AI use in education serve as important reminders of the need to navigate the intersection of education and technology with caution and care.

Benefits of AI-Supported Education Reforms

The benefits that AI-supported education reforms bring to both the USA's and China's educational landscape are vast and transformative. As AI technologies infiltrate more areas of human life, the case for their inclusion in education becomes increasingly compelling. By harnessing the power of AI, the education sector can realize an array of benefits that span personalizing learning experiences, improving engagement

and learning outcomes, analyzing educational data for insights, and optimizing teaching approaches (Bates & Galloway, 2012). The following section provides a deeper exploration of these benefits by drawing on various studies and experiences from both countries.

At the core of AI-supported education reforms is the focus on personalizing learning experiences. This emphasis recognizes that learners are unique and have their own individual learning styles, paces, and needs. AI-powered systems offer the ability to tailor instruction to meet each student's needs, thereby increasing the efficiency of the learning process (Pane et al., 2015). These systems analyze students' performances, learning habits, and preferences and provide personalized content and feedback, making learning more engaging and effective. This form of adaptive learning has been found to result in better academic performance, increased motivation, and improved retention rates (VanLehn, 2011).

For instance, AI-supported platforms in the USA such as DreamBox Learning and BrightBytes are helping to create personalized learning experiences that are adaptive, flexible, and responsive to the needs of diverse learners (Woolf, 2010). Similarly, AI platforms in China such as Squirrel AI are pioneering adaptive learning by providing personalized tutoring services, thus leading to enhanced learning outcomes (Li et al., 2024). These developments underscore the profound role AI can play in creating learning experiences that are student-centered and tailored to individual needs.

Another significant benefit of AI-supported education reforms is the efficient analysis of vast educational data. AI-powered analytics tools can process and interpret large volumes of data, turning them into meaningful insights that inform instructional design, curriculum development, and pedagogical practices. These insights can help educators identify gaps in student learning, pinpoint areas of strength and weakness, and monitor progress over time.

Moreover, integrating AI technologies into education can provide teachers with tools that enhance their teaching practices. Intelligent tutoring systems (ITS) that utilize AI to offer immediate and personalized feedback to students can save teachers time and increase their efficiency (Koedinger et al., 2012). AI can also aid in administrative tasks such as grading and scheduling, thereby freeing up teachers' time for more impactful instructional activities (Luckin et al., 2016).

On a macro-scale, AI-supported education reforms can contribute to expanding access to education. In both China and the USA, AI technologies have been employed to provide educational resources to students who may otherwise have limited access, such as those in rural or disadvantaged areas. In China, AI-powered teaching robots have been used in remote areas to deliver quality education to children who lack access to qualified teachers. Similarly in the USA, AI technologies have been utilized to offer personalized learning resources to students in under-resourced schools, contributing to closing the education equity gap (Holstein et al., 2019).

In conclusion, the benefits of AI-supported education reforms are wide-ranging and transformative, spanning personalized learning experiences, efficient educational data analysis, improved teaching practices, and expanded access to education. However, the realization of these benefits necessitates a thoughtful, balanced, and ethically grounded approach to integrating AI into education.

Quantitative Insights: Comparing the USA and China in Terms of AI Adoption and Its Impact on Education

The impact AI has on education systems is undeniably transformative, prompting a closer examination of the data supporting these transformative changes, particularly in the USA and China. As two leading countries in AI research and development, their efforts to incorporate AI into education offer a compelling basis for comparative analysis. By exploring the statistical evidence and outcomes of AI-supported education reforms in these nations, a comprehensive understanding of the current landscape and future prospects can be obtained. Such an analysis will shed light on the effectiveness of integrating AI into education and inform discussions on the future of AI-supported reforms in both countries. By examining governmental and institutional reports alongside academic research and industry statistics, this analysis aims to offer an in-depth understanding of AI's penetration and efficacy in countries' respective educational landscapes.

To begin with, examining the rate at which AI technologies have been integrated into the education sector in each country is essential. Recent statistics reveal that China has aggressively been adopting AI,

with approximately 77.6% of Chinese schools implementing AI in various capacities as of 2021 (Ministry of Education of the People's Republic of China, 2021). This is not surprising given China's ambitious AI development plan, which includes education as a key focus area. On the other hand, data from the Center for Digital Education (2020) shows that nearly 48% of school districts in the USA have adopted AI in some form, indicating a somewhat slower rate of adoption.

The difference in these statistics doesn't necessarily depict one country as being better than the other. Instead, it emphasizes how national priorities and resources shape AI's role in education. The Chinese government's push for AI integration aligns with its broader technological ambition, reflecting its readiness to invest heavily in this field. Conversely, the USA with its diverse and decentralized education system exhibits a different approach, with decisions on adopting AI often occurring at the district or school level.

Examining performance outcomes linked to AI-supported education next will provide another critical dimension to this comparison. In both China and the USA, AI incorporation has consistently resulted in increased student engagement, better learning outcomes, and greater teaching efficiency (Pane et al., 2015). For example, a study in China involving more than 10,000 students found the use of AI-assisted learning platforms to lead to an average increase in test scores of 15–20% within one academic year. Meanwhile, students in a Florida school district in the USA using AI-based adaptive learning platforms demonstrated an average improvement of 11% in their math scores (Pane et al., 2015). These findings confirm the positive impact AI has on academic performance, though the extent of its benefits can vary depending on a multitude of factors such as the specific technology used, its implementation strategy, and the overall learning environment.

In both the USA and China, regulations exist to protect students' data privacy, such as the Family Educational Rights and Privacy Act (FERPA) in the USA and the Personal Information Protection Law (PIPL) in China (US Department of Education, 2020). However, the rapid advancement of AI technologies poses challenges to these existing legal frameworks, necessitating regular reviews and updates to ensure they remain relevant and effective.

Lastly, the focus areas of AI-supported education reflect the unique educational challenges and strategic objectives within each country. In China, the vast geographical and demographic diversity calls for AI's

use to increase education access, particularly in remote and underserved areas. Moreover, China is heavily invested in personalizing education, employing AI to customize learning based on individual students' abilities and progress. Meanwhile, the focus of AI in the USA is more on facilitating adaptive learning, aiding teachers with data-driven insights, and handling administrative tasks to allow educators more time for instruction.

To conclude, the statistics and comparisons illustrate that both China and the USA have made significant advancements in AI-supported education. However, the pace, impact, and focus of these reforms are shaped by the unique needs, resources, and objectives within each country. This analysis offers an insightful understanding of these variances and underlines the importance of contextualizing AI's role in education.

Challenges and Ethical Considerations

While the benefits of AI-supported education reforms are extensive, they are accompanied by a range of ethical considerations that demand careful attention. As AI increasingly influences the educational sector, stakeholders must address concerns related to privacy, bias and fairness, transparency, and accountability (Bietti, 2020). These ethical considerations necessitate a robust framework for the ethical and responsible use of AI in education. The following section delves into these ethical considerations by providing insights from both the USA and China.

Privacy is a central concern in the use of AI in education. With the growth of AI applications comes an increase in data collection, and this includes sensitive student information in the education sector (Rogers, 2021). For AI systems to personalize learning effectively, they need access to vast amounts of data about students' learning behaviors, preferences, and performances. However, this raises questions about how these data are stored, who has access to them, and how they are used (Zeide, 2018).

Bias and fairness represent another critical ethical consideration in AI-supported education. AI systems are trained on datasets, and if these datasets are biased, the AI systems are likely to perpetuate these biases (Eubanks, 2017). For instance, an AI system that is trained on a dataset of high-performing students from well-resourced schools may struggle to accurately assess and support students from under-resourced schools or

those with learning difficulties. Similarly, cultural biases could be reinforced if AI systems are trained predominantly on Western or Eastern educational philosophies and methods (Reich, 2020).

Furthermore, transparency and accountability are pivotal ethical considerations. Having stakeholders, including students, parents, teachers, and administrators, understand how AI systems operate, make decisions, and affect learning outcomes is essential (Floridi & Cowls, 2019). Additionally, clear lines of accountability need to be established for the outcomes of AI applications in education, including both successful and unsuccessful outcomes (Bietti, 2020). In both the USA and China, efforts are being made to develop guidelines and frameworks that ensure transparency and accountability in AI-supported education reforms (Russell, 2019).

Acknowledging the ethical implications that arise from integrating AI into education is important. Ethics on using AI in education covers a wide range of issues, including data privacy, algorithmic transparency, and risk of bias and discrimination (UNESCO, 2020). These ethical concerns need to be carefully considered to ensure that AI is implemented responsibly and fairly in educational settings.

In conclusion, while AI-supported education reforms present significant opportunities for enhancing education, they also bring a range of ethical considerations that must be proactively addressed. These concerns require careful balancing, ethical oversight, and a commitment to putting students' rights and interests at the center of AI-supported education reforms.

Conclusion

The ongoing AI-supported reforms in the education sectors of China and the United States of America clearly demonstrate the significant potential AI has to bring about substantial transformations in education. Various aspects of the education system, including personalized learning, adaptive instruction, data analytics, and intelligent tutoring systems, are currently being restructured and optimized under the umbrella of AI integration.

Protecting data privacy is of utmost importance when leveraging AI systems in education. AI relies on access to extensive amounts of personal and sensitive data to operate effectively. Therefore, establishing stringent data privacy measures is crucial. Educational institutions and policymakers need to develop robust regulations and guidelines to safeguard

student data from unauthorized access and misuse and foster trust among students, parents, and educators regarding the use of AI in education.

In conclusion, the profound transformation AI is bringing about in the education sector is undeniable. The AI-supported education reforms in China and the USA illustrate a future where education is more personalized, adaptive, and data-driven. However, approaching this future with a keen awareness of the ethical challenges that AI integration presents is equally important. Striking a balance between leveraging AI's benefits and ensuring this technology's responsible and ethical use is critical. As the journey of AI integration in education continues, prioritizing stringent data privacy measures, transparency in AI algorithms, and a steadfast commitment to fairness and equality will be instrumental in shaping an inclusive and equitable future for education.

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South Korea's Educational Leap Forward: Fostering Reforms in Pedagogy and Curriculum Through Digitalization and Innovation

İrfan Ayhan

Introduction

South Korea's ascendancy as a global education leader has been characterized by its exceptional advancements and outstanding scholastic accomplishments. Notably, the nation's educational framework has undergone substantial transformations, embracing digitalization and innovation to enrich its pedagogy and curriculum. Through the assimilation of cutting-edge technologies and the adoption of progressive teaching methodologies, South Korea has spearheaded an educational paradigm shift. This article will delve into the manner in which South Korea has harnessed digitalization and innovation to revolutionize its educational system and thus result in the enhancement of its pedagogical practices and curriculum.

The World Bank (2021) has noted the ascent of global education investments to be witnessing an upsurge, as educational initiatives are

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being bolstered by governments, international organizations, and philanthropic entities. Inclusive and equitable education has taken precedence in the United Nations' Sustainable Development Goal (SDG) 4 (UN, 2023), while the mobilization of funding to support education in low-income countries has been spearheaded by the Global Partnership for Education (GPE, 2023). These endeavors seek to cultivate sustainable development and bestow individuals with empowerment through the medium of quality education.

In line with this, the bedrock of South Korea's educational prowess lies in its substantial investments in the sector. The government has accorded paramount importance to education, allocating significant resources to erect a resilient and comprehensive educational infrastructure. The government's generous public expenditures in education have facilitated the provision of first-rate schools, state-of-the-art facilities, and abundant resources for students and educators alike (Organisation for Economic Co-operation and Development [OECD], 2019). This considerable investment underscores the nation's unwavering dedication to fostering human capital and cultivating an erudite society. Figure 1 illustrates South Korea's investment in education over the years (OECD, 2023b).

South Korea's cultural reverence for education has played a pivotal role in shaping its educational landscape. Education is highly prized, occupying a position of paramount importance within South Korean families. The pursuit of academic excellence is deeply ingrained in the societal fabric, as parents, students, and educators exhibit unwavering dedication to educational attainment. The tenets of diligence, discipline, and arduous effort have forged a culture that champions academic achievement and the pursuit of higher education (Lee, 2019).

South Korea has accorded great importance to recruiting and raising exceptionally skilled educators. The teaching profession is accessed exclusively by individuals who have demonstrated remarkable competence through rigorous selection procedures. Teachers in South Korea undergo arduous training and actively engage in extensive programs dedicated to their professional development, thereby enhancing their pedagogical acumen and subject mastery (OECD, 2019). The nation's resolute dedication to the perpetual advancement of teachers' expertise, coupled with unwavering support, serves as a catalyst for the provision of exceptional education within classrooms throughout the nation.

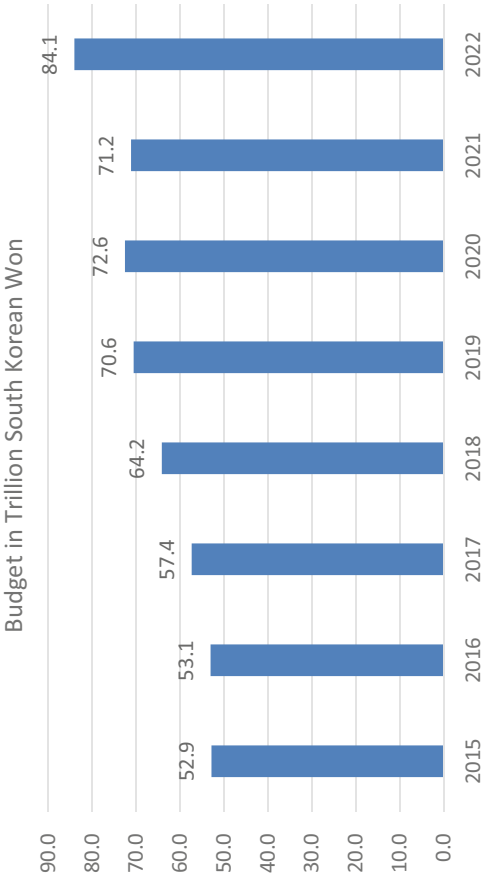

Fig. 1 South Korean local governments' budgets for educational sectors from 2015–2022 in trillions of South Korean won

South Korea has taken significant strides to initiate comprehensive revisions to its educational framework in order to align it with the demands of the twenty-first century. The nation's recognition of the paramount importance of equipping students with the skills essential for a rapidly evolving global economy has led to the introduction of pioneering pedagogical methodologies and an updated curriculum. Departing from conventional methods of rote-learning, South Korea has incorporated student-centered and inquiry-based approaches (Kwak & Kim, 2019). These reforms prioritize the cultivation of critical thinking, problem-solving abilities, creativity, and collaboration, thus effectively preparing students for the challenges and opportunities that prevail in the contemporary world (Table 1).

The robust governance and coordination at both the national and local levels are vital contributors to the success of South Korea's education system. South Korea's Ministry of Education assumes a pivotal role in formulating policy, implementing reform, and ensuring the efficient operation of the education system. The ministry's emphasis on data-driven decision-making, research-based practices, and collaboration among stakeholders fosters a culture of continuous enhancement (Ministry of Education of Korea, 2023). Furthermore, local education authorities work closely alongside schools and educators, providing guidance and support to ensure the effective execution of national policies and initiatives.

Table 1 South Korea's investment in education

Aspect	*Description*
Allocation of resources	Significant government expenditures to build a robust educational infrastructure
Facilities	Top-tier schools with cutting-edge facilities
Resources for students and educators	Abundant resources provided for both students and educators
Commitment to human capital development	Steadfast commitment to cultivating knowledgeable society

Digitalization in Pedagogy

The global agendas pertaining to the digitalization of education have garnered significant impetus in recent times. Governments, international organizations, and educational institutions have recognized the transformative potential technology has in augmenting educational outcomes and ensuring widespread access to high-quality education. The United Nations has underscored the paramountcy of utilizing digital technologies to foster all-encompassing and fair education through its SDG 4 (UN, 2023). Furthermore, the Digital Transformation of Education Initiative, spearheaded by the United Nations Educational, Scientific and Cultural Organization (UNESCO), aims to actively foster the seamless integration of digital technologies in educational systems on a global scale (UNESCO, 2023). The World Bank (2020) has highlighted the pivotal role digital solutions play in ameliorating the access to and quality of education, particularly in low-income nations. These endeavors bear testament to the worldwide dedication toward harnessing digitalization as a means to bridge educational disparities, enhance pedagogical practices, and equip students with indispensable competencies for the digital era.

South Korea has astutely employed digitalization to effectuate a metamorphosis in pedagogical methodologies within its education system. The infusion of cutting-edge technology into classrooms has ushered in a revolution in the realms of teaching and learning. These classrooms, replete with state-of-the-art equipment including interactive whiteboards, digital projectors, and high-speed Internet connectivity, have engendered an immersive and collaborative milieu for education (Kwak & Kim, 2019). The utilization of multimedia resources, interactive simulations, and instantaneous feedback has bolstered student engagement and comprehension, as well as the cultivation of critical thinking skills (Kim et al., 2018) (Table 2).

Alongside the implementation of smart classrooms, South Korea has made substantial investments in the advancement of e-learning platforms. These platforms offer students the opportunity to avail themselves of digital textbooks, multimedia resources, and virtual learning domains (Lee, 2019). Online platforms such as the Educational Broadcasting System (EBS) and Smart Education have ushered in an educational revolution by empowering students to engage in self-paced studies and to access high-quality education regardless of their geographical constraints (Cho & Hong, 2019). Notably, these platforms have demonstrated their

Table 2 Features of smart classrooms in South Korea

Features	*Description*
Interactive whiteboards	Allows interactive teaching and collaborative learning
Digital projectors	Enhances visual presentations and multimedia content
High-speed Internet connectivity	Facilitates access to online resources and real-time feedback

exceptional value during the COVID-19 pandemic, facilitating remote learning and ensuring uninterrupted educational progression (OECD, 2021) (Table 3).

Moreover, South Korea has wholeheartedly embraced personalized learning through the utilization of adaptive technologies. By leveraging intelligent tutoring systems and learning analytics, student data is meticulously analyzed to deliver customized instruction, to identify areas for improvement, and to furnish individualized feedback (Lee, 2019). This tailored approach takes into account unique learning styles and individual progress, thus amplifying student motivation and fostering elevated academic performance (Cho & Hong, 2019).

In response to the COVID-19 outbreak, South Korea implemented various measures to fortify the digital prowess of both pre-service and in-service educators. Notably, the advent of the Knowledge Spring (2020) has brought forth an individualized teacher training platform, empowering users to select content and resources that align with their specific needs, with expert teachers providing the relevant materials. The platform also encourages nationwide teacher collaboration (OECD, 2021).

Table 3 E-learning platforms in South Korea

Platforms	*Description*
Educational Broadcasting System (EBS)	Provides access to digital textbooks, multimedia content, and virtual learning environments
Smart Education	Enables students to study at their own pace and to access quality education regardless of location

Table 4 Benefits of e-learning platforms in South Korea

Benefits	*Description*
Accessible education anytime, anywhere	Allows students to study regardless of geographical location
Continuity during the COVID-19 pandemic	Enables remote learning and ensures educational continuity

Furthermore, the establishment of the 10,000 Community serves as a support system for teachers to navigate the challenges of remote classes during online school operations. This community brings together exemplary educators, the Ministry of Education of South Korea, provincial education offices, and other related organizations to offer assistance for distance learning within school environments. Through online communication, the potential obstacles encountered during remote classes are promptly identified and resolved. These measures are reinforced by 495 pilot schools dedicated to online education, where teachers actively share the best practices throughout the system. To fortify the digital competencies of pre-service teachers and equip them with other vital skills essential for students' future, South Korea has established Future Education Centers at higher education institutions to provide initial teacher training. Ten centers were inaugurated in 2020, with an additional 18 slated to open in 2021 (OECD, 2021) (Table 4).

Innovation in Curriculum Design

The national curriculum for primary and secondary education in South Korea has been undergoing a continuous process of revision since 2015. A series of reforms were carried out between 2015 and 2020 with the aim of transitioning from a knowledge-centric instructional approach to a student-centered, competence-based approach. The curriculum revolves around six fundamental competences within this framework that are intended to be nurtured throughout a young individual's educational journey: self-management, knowledge-information processing, creative thinking, aesthetic and emotional competency, communication skills, and community competence.

Significant transformations were implemented in the primary school curriculum, which included the strengthening of Korean language education and the introduction of courses designed to foster active student engagement. At the middle school level, reforms involved the full implementation of the Free Semester Program, which was initiated in 2013 to alleviate the burden of test preparation. Apart from reducing student stress, the Free Semester incorporates innovative assessment methods to enable students to pursue career-related activities. A survey conducted in 2014 revealed an increase in satisfaction levels among students, teachers, and parents with the program.

Since 2018, South Korea has been establishing the groundwork for artificial intelligence (AI) education by progressively expanding software education in primary and middle schools. In 2020, South Korea inaugurated 247 AI pilot schools and 34 designated high schools to serve as models for AI education.

South Korea has taken significant strides in the realm of curriculum innovation with the primary objective of nurturing critical thinking, creativity, and problem-solving abilities. Gradually displacing the traditional rote-learning approach, student-centered and inquiry-based methodologies have been embraced. The curriculum now incorporates project-based learning and collaborative activities that play pivotal roles in stimulating critical thinking, the application of knowledge, and collaborative endeavors among students (Kwak & Kim, 2019). These innovative teaching methodologies serve to cultivate higher-order cognitive skills, foster creativity, and promote independent learning.

A cognizance of the vital importance of nurturing creativity and fostering an entrepreneurial spirit has spurred South Korea to introduce specialized programs within the curriculum. The inception of the Creative Schools Initiative in 2018 stands as a testament to this endeavor, aiming to foster creative thinking, design prowess, and an entrepreneurial mindset among students (Kwak & Kim, 2019). By skillfully integrating the principles of design thinking, maker education, and entrepreneurship education, South Korea equips students with the requisite skills and mindset necessary to thrive within the swiftly evolving digital landscape of the modern economy (Lee, 2019) (Table 5).

Table 5 South Korea's curriculum reforms

Reform initiatives	*Description*
Moving away from rote-learning	The adoption of student-centered and inquiry-based learning methods
Emphasizing critical thinking	The prioritization of critical thinking, problem-solving, creativity, and collaboration
Integrating innovative methods	The introduction of project-based learning and collaborative activities
Nurturing creativity and entrepreneurship	The integration of design thinking, maker education, and entrepreneurship education

Impact and Challenges

The remarkable advancements in South Korea's education system have resulted in substantial positive ramifications on student outcomes and the overall quality of education. Evidenced by their consistently impressive performance in esteemed international assessments such as the Program for International Student Assessment (PISA), South Korean students consistently demonstrate an elevated level of academic proficiency (OECD, 2019). The unwavering focus on fostering critical thinking, problem-solving capabilities, and creativity has endowed South Korean students with the essential skills required to thrive within the modern workforce of the twenty-frist century.

Nevertheless, the educational landscape of South Korea is not devoid of challenges. The pervasive culture of intense competition and the relentless pursuit of academic success can contribute to elevated levels of stress among students (Kim et al., 2018). Striking a delicate balance between academic rigor and student well-being remains an utmost priority for policymakers and educators. Conscientious efforts are being undertaken to promote a holistic approach to education that encompasses physical and mental well-being, character development, and social-emotional learning.

Future Directions

In its forward-looking trajectory, South Korea envisions a continued expedition of educational transformation through the integration of digitalization and innovation. The nation intends to harness the power of

emerging technologies such as AI, augmented reality (AR), and virtual reality (VR) to enrich the realm of teaching and learning, as detailed by Kwak and Kim (2019). By amalgamating AI-driven intelligent tutoring systems and immersive VR simulations, the potential arises to create personalized and captivating learning environments.

In addition, South Korea is resolute in its endeavor to foster digital literacy and equip students with the indispensable skills required to navigate the intricacies of the digital era proficiently. The formulation of a comprehensive digital literacy curriculum and the provision of training to educators in the realm of digital pedagogy are instrumental strides toward adequately preparing students for the demands that lie ahead (Cho & Hong, 2019).

South Korea has delineated ambitious strategies aimed at propelling the advancement of pedagogy and curriculum through the medium of digitalization and innovation. The nation duly recognizes the utmost significance of endowing students with the requisite skills and competencies to adeptly navigate the multifaceted dimensions of the future digital landscape. Presented below are pivotal future plans and initiatives to this effect (OECD, 2023a, 2023b):

1. *Digital Transformation in Education*: South Korea is poised to capitalize on emerging technologies such as AI, AR, and VR to revolutionize teaching and learning paradigms. The integration of AI-driven intelligent tutoring systems and immersive VR simulations holds immense promise in creating personalized and captivating educational environments that cater to individual student needs.
2. *Cultivating Digital Literacy*: Recognizing the imperative of digital literacy in the twenty-first century, South Korea aims to develop a comprehensive curriculum that imparts critical digital skills to students. Furthermore, empowering educators with the pedagogical expertise to navigate digital tools and platforms effectively is crucial for fostering a digitally proficient teaching workforce.
3. *Empowering STEM Education*: South Korea places significant emphasis on bolstering Science, Technology, Engineering, and Mathematics (STEM) education. The nation seeks to elevate the quality and relevance of STEM instruction by seamlessly integrating it into the curriculum across all educational levels. This entails fostering experiential learning, interdisciplinary approaches,

and collaborations with industry to nurture innovation and cultivate problem-solving acumen among students.

4. *Expanding Online and Blended Learning*: South Korea envisions an expansion of online and blended learning opportunities by ensuring greater flexibility and accessibility for students. By refining e-learning platforms and harnessing the potential of blended learning models, the nation aims to offer tailored and inclusive educational experiences that complement traditional classroom settings.
5. *Collaborative Endeavors and Research*: South Korea recognizes the transformative power of collaboration and research in propelling educational innovation. Encouraging partnerships among educational institutions, industry stakeholders, and research organizations serve as a catalyst for exploring cutting-edge technologies, pedagogical methodologies, and evidence-based practices in digital education.

By steadfastly pursuing these forward-looking plans, South Korea aims to fortify its position as a global vanguard in educational innovation, equipping its students with the dexterity and resilience needed to thrive in an increasingly digital-centric era.

Currently, South Korea is actively engaged in further curriculum revisions that will be gradually implemented in primary schools starting in 2024, followed by secondary schools in 2025. This process entails a reconsideration of the core competences with a specific focus on equipping learners with the adaptability necessary to navigate future changes. Moreover, South Korea intends to involve key stakeholders, including students, teachers, and parents in the revision process, as well as the metropolitan and provincial offices of education. The establishment of a curriculum development governance system that encourages the participation of the general public is also part of South Korea's plan.

2023 was designated as the inaugural year for the comprehensive educational reform, which aims to advance through four distinct areas of reform and 10 key policies. The Ministry of Education intends to diligently prepare for this reform by conducting pilot operations to identify exemplary models. Emphasis will be placed on nationwide expansion and establishment starting in 2024. The four areas of reform and their corresponding policies are shown in Table 6 (Ministry of Education of Korea, 2023):

Table 6 Four reform areas and 10 core policies of South Korea's future educational reforms

Student-customized education reform	1. The introduction and promotion of a digital textbook platform that will serve as the foundation for personalized education
	2. Significantly enhancing pedagogical capabilities in schools by transforming classroom teaching methods and expanding school autonomy
	3. Formulating various support plans to enable teachers to concentrate on teaching
Family customized education reform	4. Thorough preparation for the integration of early childhood education and childcare by establishing a Reservation Integration Promotion Team
Regional customized education reform	5. Thorough preparation for the integration of early childhood education and childcare by establishing a Reservation Integration Promotion Team
	6. Ensuring regional and university autonomy through progressive regulatory innovation and transfer of authority
	7. Pilot implementation of Regional Innovation System & Education (RISE) in around five local governments, with plans for expansion to all regions in 2025. This will involve fostering the development of global/local universities in collaboration with the respective regions
	8. Revitalizing the region by providing support for complex school facilities
Education reform tailored to industry and society	9. Full-scale implementation of a national-level high-tech talent development system
	10. Launching the Talent Fostering Strategy Meeting, led by the President, to develop plans for nurturing talent in key high-tech fields such as biohealth, aerospace, and aviation

On January 5, 2023, the Ministry of Education headed by Deputy Prime Minister and Minister of Education Lee Ju-ho presented the major task promotion plan for 2023 titled "Education Reform: The Beginning of South Korea's Leap Forward" at the Blue House guesthouse. The Ministry of Education has established a vision centered around education's role as a driving force for national development and as a means to foster the welfare of the people. From 2023 onwards, they will actively implement education reform by focusing on the four reform areas and 10 core policies (Ministry of Education of Korea, 2023). The study will now take a look at those in detail:

A. **Student-Customized Education Reform**

1. *Innovation in digital-based teaching–learning methods*

   Technology advancements facilitate the digital transformation that empowers educators' delivery in their classes and provides tailored learning opportunities for individual students. In January, the Digital-Based Education Innovation Plan will be introduced with the aim of establishing a digital textbook platform by 2025. This plan involves the utilization of AI-based courseware that builds upon existing paperback textbooks. Additionally, the expansion of test beds and the establishment of the Edutech Promotion Plan within the first half of the year will address educational challenges through the integration of new digital technology.

2. *Enhancement of school education*

   Customized education for students will be supported by enhancing school education through innovative approaches to classroom instruction and evaluation, strengthening the overall capacity of high school education, and nurturing exemplary schools in the localities. In February 2023, the High School Credit System Complement Plan was established to revitalize classroom teaching and evaluation methods. Furthermore, the Classroom Class Innovation Plan will be implemented in the first half of 2024, fostering project discussion-based classes and leveraging AI and educational technology (edutech). Additionally, the High School Education Competence Improvement Plan will be introduced during the first half of 2024 to enhance the role of

national high schools as pioneering models for educational innovation. By fostering collaboration among schools, metropolitan and provincial education offices, and local governments, this plan endeavors to broaden the scope of school autonomy. Its ultimate objective is to facilitate customized education for all students by offering a multitude of diversified high school options.

3. *Support for teacher innovation*

Measures will be taken to enhance teachers' capabilities and improve their working conditions, enabling them to innovate their teaching practices. A committee comprising experienced educators and experts was established in January 2023. Subsequently, the Plan for Pilot Operation of Specialized Graduate Schools of Education was implemented in April 2023 to support graduate-level teacher training and encourage innovative teaching and educational practices based on future competency development and educational research. By August of 2023, plans will be formulated in collaboration with the educational field and teacher organizations to strengthen the protection of educational activities, reduce administrative burdens on teachers, and enhance the teacher personnel system.

B. ***Family Customized Education Reform***

1. *Promotion of the consolidation of pre-school education*

Kindergartens and daycare centers will be redesigned into new high-quality educational institutions by considering the developmental needs and characteristics of infants and young children through the integration of reservations and preschools. In January 2024, the Pre-School Integration Promotion Committee and Pre-School Integration Promotion Team will be established within the Ministry of Education. Central and local management systems will gradually be unified, emphasizing equitable and high-quality childcare and educational opportunities for all infants and toddlers. The Management System Integration Plan will be announced during the first half of 2024, followed by the introduction of the Gap Reduction Plan between Kindergarten and Daycare Centers in the second half of 2024.

2. *Promotion of the Neulbom School*

The Neulbom School initiative will be earnestly promoted to provide personalized education and care services (Educare)

to elementary school students by utilizing various educational resources both within and outside of school. The Neulbom School will offer new demand programs, including AI and software, as well as tailored after-school programs encompassing cultural, sports, and artistic activities. To alleviate schools' and teachers' workloads, the operating system will be rearranged around the Education (Support) Office, and dedicated personnel will be provided. Four pilot education offices will be selected in 2024 for intensive support in terms of manpower and finances, with the nationwide expansion of the Neulbom School scheduled for 2025.

C. ***Regionally Tailored Education Reform***

1. *Regulatory innovation, transfer of authority, and university structural reform*

   Measures will be taken to promote regulatory innovation, devolve authority to provincial administrations, enhance regional and school autonomy, and reform university structures. Restrictive regulations pertaining to the quotas, academic policies, and financial operations of universities will be decisively lifted. Additionally, government-led uniform evaluations will be abolished, with general funding support facilitated through the financial diagnosis conducted by the Private School Promotion Foundation and the institutional evaluation certification provided by the South Korean Council for University Education and the College Education Association. Universities facing challenges will undergo structural reforms to improve their overall functioning. The Ministry of Education is actively transferring authority, such as approving the establishment or closure of higher education institutions in free economic zones, and developing plans to support local universities and talent development in collaboration with local governments. By easing educational regulations regarding the establishment and operation of schools, a special free education zone will be designated and operated to facilitate region-specific public education. Plans to revise laws and initiate pilot operations will be formulated during the first half of 2023, aiming for full implementation by 2024.
2. *Establishment of Regional Innovation System & Education (RISE)*

To enhance the competitiveness of local universities, increase the authority of local governments in supporting higher education institutions, and streamline regulations, a Regional Innovation System and Education (RISE) will be established. Initially piloted in approximately five local governments in 2023, RISE will expand to encompass all regions by 2025. Through specialization and alignment with regional development strategies, the objective is to nurture global and local universities with world-class competitiveness, fostering regional growth and elevating universities' standings.

3. *Promotion of school facility complexification*

Efforts will be made to revitalize regions by transforming school facilities, including elementary schools, middle schools, high schools, and universities, into public facilities that can be utilized by local residents. In February, the government plans to establish measures to revitalize school facility complexes by exploring avenues to expand financial resources and improve regulations to further stimulate the utilization of these facilities. Emphasis will be placed on leveraging school facilities in conjunction with various policies within and beyond provinces, such as the Neulbom School (Ministry of Education), urban regeneration projects (Ministry of Land, Infrastructure, and Transport), and the relocation of public institutions (Ministry of Balance).

D. ***Education Reform Tailored to Industry and Society***

1. *Cultivation of talents in key cutting-edge fields*

To gain a competitive advantage in the global race for technological supremacy, efforts will be made to nurture talents in crucial cutting-edge fields. In February, the President-led Talent Fostering Strategy Meeting was inaugurated to establish a comprehensive cross-governmental system for talent development. Following 2022s focus on semiconductor and digital sectors, plans to foster talents in key fields such as bio-health, environment/energy, aerospace/aviation, and high-tech materials will be devised in collaboration with relevant ministries and announced sequentially.

2. *Promotion of major education reform legislation*

To ensure the autonomy of education as a driving force for national and regional growth, legislation will be enacted

> to enhance regional educational capabilities. Close collaboration with the National Assembly will be pursued to introduce the mayor/province governor-superintendent running mate system, thereby amending the Local Education Autonomy Act and the Public Official Election Act to foster education that is closely aligned with regional needs. Grounds will be prepared for the stable implementation and operation of special educational zones, enabling schools to be established and operated with greater freedom. Extensive revisions to the Higher Education Act and the Private School Act will also be advanced, establishing a future-oriented institutional foundation that encompasses a long-term perspective of 20–30 years, thus ensuring the autonomy and creativity of universities while promoting innovation.

Deputy Prime Minister and Minister of Education Lee Joo-ho stated that, due to high public expectations and concerns from educational stakeholders, the ministry aims to provide thorough explanations throughout the process of promoting education reform tasks and to gather comprehensive opinions from the field. Given the essential nature of collaboration with ministries, provincial offices of education, and the private sector, the ministry will concentrate its efforts on fostering cooperative partnerships to achieve solidarity and cooperation.

Conclusion

In conclusion, South Korea's commitment to digitalization and innovation has revolutionized its education system. The nation's investments in education, coupled with robust governance and coordination, have laid a strong foundation for educational excellence. The integration of cutting-edge technologies such as smart classrooms and e-learning platforms has created immersive and collaborative learning environments, while personalized learning approaches and adaptive technologies have enhanced individualized instruction and student engagement. South Korea's response to the COVID-19 pandemic, including the Knowledge Spring platform and the 10,000 Community, has supported teachers and ensured uninterrupted learning. These initiatives showcase South Korea's resilience and adaptability. By bridging educational disparities, enhancing pedagogical practices, and equipping students for the digital era, South Korea serves

as a model for other nations. The nation's success in harnessing digitalization and innovation underscores the transformative potential technology has in education.

South Korea's curriculum innovation has revolutionized education by prioritizing critical thinking, problem-solving, creativity, and collaboration. The shift from rote-learning to student-centered approaches has equipped students with the skills essential for the modern workforce. Challenges such as competition-induced stress highlight the need for a holistic approach that promotes well-being and character development. By looking ahead, South Korea aims to integrate emerging technologies such as AI, AR, and VR to create personalized learning environments. Digital literacy, STEM education, online and blended learning, and collaborative research are key focus areas for future development. South Korea's commitment to digitalization and innovation ensures a promising trajectory in preparing students for the demands of the digital era.

South Korea is actively pursuing a comprehensive educational reform plan to strengthen its global leadership in innovation. Through four areas of reform and 10 core policies, the country aims to equip its students with the skills needed for success in a digital-centric era. The reform focuses on student customization, family customization, regional tailoring, and industry and society alignment. By introducing digital-based teaching methods, enhancing school education, supporting teacher innovation, promoting pre-school education consolidation, establishing the Neulbom Schools, facilitating regulatory innovation, and nurturing talents in key fields, South Korea is committed to fostering an innovative and responsive educational system. Collaborative partnerships with stakeholders are crucial in achieving these goals, and the Ministry of Education seeks comprehensive input from the field. Through these reforms, South Korea is poised to lead the way in preparing its students for the future, ensuring their adaptability and resilience in an evolving world.

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From Integrated to Standard: Reformation of the Islamic Religious Education Curriculum and Teacher Training in Malaysia

Asyraf Isyraqi Bin Jamil, Abd Aziz Rekan, and Sulmi Badar

Introduction

Malaysia is a developing country that supports high standards for education. The country's aim for education is to provide a solid foundation of knowledge across all subject areas. Since the dawn of modernity and globalization, Malaysia has also adapted to technological advancements and social changes. This adaptation is intended to meet the needs of the aging generation in an unstoppable world. As a result, Malaysia's educational system has been undergoing a radical transformation, so that national and global needs can interact harmoniously. One component that has changed is the curriculum at the school levels beginning in preschool with students

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aged 4–6 years, then in primary school with students aged 7–12 years, and in secondary school with students aged 13–17 years.

The *Kurikulum Prasekolah Kebangsaan* [National Preschool Curriculum (KPK)], which previously served as the preschool curriculum, has been replaced by the *Kurikulum Standard Prasekolah Kebangsaan* [National Preschool Standard Curriculum (KSPK)]. At the primary level, the *Kurikulum Bersepadu Sekolah Rendah* [Primary School Integrated Curriculum (KBSR)] was replaced by the *Kurikulum Standard Sekolah Rendah* [Primary School Standard Curriculum (KSSR)], and at the secondary level, the *Kurikulum Bersepadu Sekolah Menengah* [Secondary School Integrated Curriculum (KBSM)] was replaced by the *Kurikulum Standard Sekolah Menengah* [Secondary School Standard Curriculum (KSSM)]. Adding the word standard to the preschool curriculum and converting the word integrated to standard for the primary and secondary school curricula did not occur without any reason. One of the reasons was to empower mastery of twenty-first-century learning competencies, including communication and collaborative skills and creative and critical thinking skills, as well as the appreciation of noble ideals. This recent standard-based curriculum has established the basic curriculum that must be mastered by school-level students in all subjects, including *Pendidikan Islam* [Islamic Religious Education (IRE)].

This transformation has had significant implications for teacher education in the teacher training centers and faculties in Malaysia. Teacher education and teacher training are provided continually at several centers managed by the *Institut Pendidikan Guru Malaysia* [Malaysian Teacher Education Institute, or IPGM], which is in charge of managing the *Perkhidmatan Pendidikan Guru* [Teacher Education Service (PPK)] at the pre-service and in-service levels. Furthermore, several higher education institutions, including *Universiti Malaya* [University of Malaya], *Universiti Kebangsaan Malaysia* [National University of Malaysia], *Universiti Putra Malaysia* [Putra University of Malaysia], and *Universiti Pendidikan Sultan Idris* [Sultan Idris Education University], provide education programs with a variety of options and fields at the Bachelor's, Master's, and Doctorate levels. These centers and faculties serve a vital role in training and preparing competent potential teachers. Trainee teachers are exposed to knowledge and skills regarding subject content, pedagogy, psychology, assessment, educational administration and leadership, effective classroom management, educational innovation, and technology applications in education throughout their studies, as well as

teaching ethics and professionalism. This exposure is intended to assist them in further improving their knowledge, skills, and potential in the field of education. Moreover, through extensive teacher training, trainee teachers are well prepared to meet any curriculum revisions and current educational difficulties. As a result, trainee teachers serve as agents of change, introducing new curriculum visions into schools.

This chapter will discuss Malaysia's experience in transitioning the IRE curriculum in schools from the concept of an integrated-based curriculum to a standard-based curriculum, as well as Malaysia's relationship with the preparation of IRE trainee teachers in teacher training centers and faculties for the new school curriculum and mastery of twenty-first-century learning competencies. Both inductive and deductive analytical approaches have been used as derived from several authoritative literatures, as well as a content analysis approach regarding several documents pertaining to the specific experiences of the Islamic Education Program of the Academy of Islamic Studies at *Universiti Malaya*, which provides IRE teacher training programs, particularly at the undergraduate level.

Islamic Religious Education (IRE) in Malaysia

Malaya (Malaysia's previous name) has historically been a focal point for both local and international societies due to its strategic geographic location. British colonialism, which implemented a liberal immigration policy, had encouraged migration to the land, followed by a divide and conquer policy that resulted in racial segregation, particularly in terms of settlement, education, and employment, thus widening the racial polarization gap (Thukiman, 2020). Nonetheless, Islam retains the highest position in the national constitution (see Article 3(1) of the Malaysia Federal Constitution [MFC], 2010), due to the consensus regarding the rights of the Malays as the original people. The constitution also concludes Islamic religious affairs' placement under the auspices of the Paramount Ruler for the federal territories and the states without rulers, and under the Rulers for the states with rulers (see Articles 3(2), 3(3), and 3(5) of the MFC, 2010). This position gives an advantage to IRE being conducted in Malaysia.

Following that, Section 18(2) of the Education Act 1996 (Act 550) states that IRE is a core subject in primary and secondary schools for students who profess the religion of Islam. In addition, Section 50(1) specifies that if an educational institution has five or more Muslim

students, then they must be given Islamic religious teaching by a teacher approved by the authority (Legal Research Board Malaysia [LRBM], 2021).

Currently, all primary and secondary national schools use a standard curriculum approach for IRE (Kementerian Pendidikan Malaysia [KPM], 2013). Due to the existence of two categories of national primary schools (i.e., *Sekolah Kebangsaan* [National School] and *Sekolah Jenis Kebangsaan* [National-type School], which includes *Sekolah Jenis Kebangsaan Cina* [Chinese National-type School] and *Sekolah Jenis Kebangsaan Tamil* [Tamil National-type School]),[1] a difference occurs in the annual minimum teaching hours for IRE (KPM, 2017). In national schools, 96 teaching hours are allocated to IRE, whereas in national-type schools, 64 teaching hours are allocated to Standard 1, 2, and 3 students, as well as 80 to Standard 4, 5, and 6 (KPM, 2019a). At the secondary school level, the allocation of annual teaching hours differs between the lower secondary level (students aged 13–15) and the upper secondary level (students aged 16–17). The lower secondary level students receive 128 hours, while the upper secondary level students receive 96 hours (KPM, 2016a, 2019b).

Furthermore, two other curriculum approaches are found specifically related to the teaching of Islam at the secondary school level: the *Kurikulum Bersepadu Dini* [Islamic Religious Integrated Curriculum (KBD)], and the *Kurikulum Bersepadu Tahfiz* [al-Qur'an Memorization Integrated Curriculum (KBT)], both of which have different annual minimum time allocations for the relevant Islamic religious subjects. Both of these curriculum approaches are also used in a variety of Malaysian religious secondary schools, including *Sekolah Menengah Kebangsaan Agama* [National Islamic Religious Secondary Schools], *Sekolah Berasrama Penuh Agama* [Islamic Religious Boarding School], *Sekolah Berasrama Penuh Integrasi* [Integrated Religious Boarding Schools], and *Sekolah Agama Bantuan Kerajaan* [government-aided Islamic Religious School] (KPM, 2017).

[1] The national schools use Malay as the language of instruction, whereas the two national-type schools use their own languages of Chinese and Tamil.

History of IRE Curriculum in Malaysia

The evolution of IRE curriculum in Malaysia can be divided into three major periods: pre-British colonialists (pre-1824), during the British colonial period (1824–1957), and after the independence of Malaya (post-1957; Aslan, 2019; Mior Jamaluddin, 2011; Mohd Nor & Wan Othman, 2011). Since the arrival of Islam in the Malay world, Islamic education has been practiced informally, with teaching and learning activities taking place in the homes of ulama (Hashim & Langgulung, 2008; Mohd. Salleh, 2004). However, as the number of students increased, the majority of activities not strictly limited to the study of the Qur'an such as the study of tawhid, fiqh, Sufism, and Islamic philosophy could no longer be carried out solely in ulama homes or *pondok*s [hut] but also had to occur in mosques, *surau* [a place for worship smaller than mosque], and the palace (Aslan, 2019; Ishak, 1995; Mior Jamaluddin, 2011; Mohd Nor & Wan Othman, 2011).

After British colonists entered Malaya, the Muslim education system underwent modifications through the emergence of various institutions, including *pondok*s, madrasahs (Islamic religious schools), Malay schools, and English schools (Sang, 2000). These institutions subsequently divided the schooling system into two categories: national schooling (Malay and English vernacular schools) and religious schooling (*pondok*s and madrasahs; Hashim, 2011). Religious schooling later evolved into a private education approach with its own curriculum that equipped students to continue their studies in the Middle East (Hashim, 2014).

Once the country gained independence, the implementation of IRE became more organized. Through several enactments, IRE was officially certified as one of the subjects in national schools whose implementation was required in every school with at least 15 Muslim students (KPM, 1972). In 1959, the IRE syllabus was again reviewed and officially implemented with the same time allocation (Mohd. Salleh, 2004).

Due to significant deficiencies in the old curriculum, the IRE syllabus was amended again in 1967 by a commission constituted and approved by the *Majlis Raja-raja* [Council of Rulers] (Mohd Nor & Wan Othman, 2011). As a result, IRE was introduced in government-aided schools in 1968, and all Muslim students were expected to study it even though the subject was not yet required for major national exams at the time (KPM, 1979).

In 1979, an assessment of policy implementation was conducted by the *Jawatankuasa Kabinet* [Cabinet Committee], leading to the development of the *Kurikulum Baru Sekolah Rendah* [New Primary School Curriculum] and the *Kurikulum Baru Sekolah Menengah* [New Secondary School Curriculum]. Both curricula were restructured in 1988 with a new rebranding and restructuring, as well as the introduction of the new names *Kurikulum Bersepadu Sekolah Rendah* [Primary School Integrated Curriculum (KBSR)] and *Kurikulum Bersepadu Sekolah Menengah* [Secondary School Integrated Curriculum (KBSM)] (KPM, 1992). Both curricula aim to establish an integrated education method that incorporates knowledge, skills, moral values, theory, and practice, which affect all school subjects, including IRE (Pusat Perkembangan Kurikulum KPM, 1998).

In 2011, both curricula were revised with the goal of developing a new approach to meeting twenty-first-century learning competencies (KPM, 2013). The *Pelan Pembangunan Pendidikan Malaysia 2013–2025* [Malaysian Education Development Plan 2013–2025 (PPPM 2013–2025)] was born as a result of these improvements and led to modifications of all subjects in national primary and secondary schools, including IRE (Husaini et al., 2018; KPM, 2016b).

Current Situation of IRE Curriculum in Malaysia

The Education Act 1996 (Act 550) states:

> The national curriculum is an education program that includes curriculum and co-curricular activities that include all knowledge, skills, norms, values, cultural elements, and beliefs to aid in the physical, spiritual, mental, and emotional development of the student, as well as to instill and enhance morally desirable values and impart knowledge.

This act demonstrates that the national curriculum as an education program consists of two primary components that educational institutions in Malaysia are to implement: the study curriculum and extracurricular activities. The levels of education accordingly include preschool education, primary education, and secondary education. As mentioned above, each level of education utilizes a distinct curriculum, including the National Preschool Standard Curriculum (KSPK), Primary School Standard Curriculum (KSSR), and Secondary School Standard Curriculum

(KSSM) (KPM, 2017). Both KSSR and KSSM are the consequence of modifications made to KBSR and KBSM in order to comply with the PPPM 2013–2025, the new policy implemented by the Ministry of Education Malaysia (KPM, 2013).

Therefore, KSSR is used at the primary school level with the goal of holistically developing the individual potential of students in order to produce people who are balanced in all aspects and ready to face the challenges of the twenty-first century (KPM, 2017). The previous KBSR had been based on four main pillars: integrated approach, comprehensive individual development, equal education for all students, and lifelong education. The nature of KBSR is integrated and aimed at producing balanced human beings through the integration of the elements of knowledge, skills, and values (KPM, 2012). Looking at the two types of curricula, KBSR is clearly integrated in nature and tries to develop balanced students, whereas KSSR is a holistic curriculum that aims to build people capable of tackling the difficulties of the twenty-first century.

KSSM has been implemented at the secondary school level in order to reflect the goal of PPPM 2013–2025, which is to develop students who can satisfy the needs of the nation. Students are exposed to information skills, critical thinking abilities, leadership, bilingualism, ethics, and spirituality, all of which can advance them to contribute to the family, society, and nation (KPM, 2014). KBSM, which had previously been in use, placed more of an emphasis on the holistic development of individual potential by considering students' skills, interests, and talents in order to prepare them for further study or employment (KPM, 2012). Following that, when comparing KBSM and KSSM, both curricula can be seen to have been created with the primary intention of addressing the societal needs of the time and any reforms to have been based on recent advancements in order to continue being comparable to other international curricula (KPM, 2013).

Several changes happened as the curricula transitioned from the integrated-based concept to the standard-based concept. First, improvements in curriculum design occurred, with KBSR and KBSM focusing on three major areas: communication, people and the environment, and individual self-development. The curriculum structure for KSSR and KSSM is built on six pillars: communication; physical development and aesthetics; humanity; self-skills; science and technology; and spirituality, attitudes, and values. Changes also occurred regarding the type of curriculum document: while KBSR and KBSM had used the syllabus description system,

KSSR and KSSM now use a more standardized document known as the *Dokumen Standard Kurikulum dan Pentaksiran* [Standard Curriculum and Assessment Document (DSKP)]. In terms of pedagogical emphasis, KBSR and KBSM emphasized five teaching methods: inquiry-based learning, problem solving, contextual learning, collaborative learning, and project-based learning. Apart from those stated in the KBSM, two new approaches were introduced to KSSR and KSSM: constructivism and Science, Technology, Engineering, and Mathematics (STEM; KPM, 2016c, 2016d) (Table 1).

Furthermore, all of these curricula consist of four categories of subjects: (1) Core Subject, (2) Compulsory Subject, (3) Extra Subject, and (4) Elective Subject (KPM, 2012). IRE is a core subject in all of the curricula and serves as one of the platforms for students to attain their goals in PPPM 2013–2025 (KPM, 2013). The main goal of IRE in KSSR is to produce knowledgeable, noble, and pious individuals guided by the Qur'an and hadiths. This aim is aligned with seven main areas in the subject: the Qur'an, Hadiths, *Ibadah* [Worship], *Sirah* [History of the Prophet Muhammad], *Adab* [Arabic Literature], and *Jawi* [Malay Language in Arabic Script]. All of these areas are prioritized based on the skills that students are expected to have obtained by the end of their

Table 1 General comparison between KBSR and KSSR, and KBSM and KSSM

Aspects	*KBSR & KBSM*	*KSSR & KSSM*
Curriculum design	Focused on three major areas: 1. Communication 2. People and the environment 3. Individual self-development	Focused on six pillars: 1. Communication 2. Physical development and aesthetics 3. Humanity 4. Self-skills 5. Science and technology 6. Spirituality, attitudes, and values
	Learning outcome-based	Standard-based: 1. Content standard 2. Learning standard 3. Achievement standard
Curriculum document	Curriculum specifications	Standard curriculum and assessment document
Skills elements	Critical and creative thinking skills	Creative, innovative, entrepreneurial, and ICT skills

ICT = information and communication technology

studies (KPM, n.d.). Students are expected to master the knowledge, skills, practice, commitment, appreciation, and habituation of every topic learned in IRE, as it is designed to meet the needs of students in terms of *fard 'ayn* [individual obligation] and *fard kifayah* [collective obligation], based on their levels and abilities.

In the context of KSSM, which is an extension of KSSR, IRE students are educated to practice and appreciate the knowledge that they have learned, with several main areas being highlighted: the Qur'an, Hadith, *Aqidah* [Islamic Creed], *Sirah*, *Tamadun Islam* [Islamic Civilization], and *Akhlak* [Islamic Ethics] (KPM, 2016b). Students are expected to always integrate the demands of *fard 'ayn* and *fard kifayah* in carrying out their responsibilities as *khalifah*s [leaders] and to even able to connect the link between *naqli* [Islamic revealed knowledge] and *aqli* [rational knowledge] to contribute to the advancement of Muslim civilization. In other words, IRE in KSSM aims to produce students who are knowledgeable and skilled, faithful, and pious; who do righteous deeds; and who have a noble character based on the Qur'an and hadiths, as well as to relate to the philosophy of Islamic education (KPM, n.d.).

IRE Curriculum and Twenty-First-Century Learning Competencies

IRE has experienced a number of challenges, including a lack of standardization in curriculum, teaching methodology, and instructional materials, resulting in inconsistencies and variances in educational quality among institutions. The utilization of several modes of education for different disciplines hampers the learning process (Suhid et al., 2021). Furthermore, concerns about IRE curriculum include an excessive number of topics that need to be reduced and improved, the absence of topics on current challenges, the lack of discussions on legal sources for problem solving, the omission of elements such as *tazkiyah al-nafs* [self-purification], and the absence of sex education to address issues such as adultery among adolescents; topics related to history, geography, and science are also not fully integrated into the teaching and learning process (Hashim et al., 2022). In addition, IRE teachers have little training or skill at incorporating technology into their teaching practices, which impedes innovation and modernization efforts. Razak et al.'s (2014) study discovered that IRE teachers struggle to grasp both content knowledge and the application of new technology concurrently. Addressing these challenges

is critical to improving the quality and relevance of IRE in Malaysia. This necessitates attempts to transform the IRE curriculum, as well as efforts to integrate the curriculum with twenty-first-century learning competencies.

Twenty-first-century learning competencies are part of the change of education in this time and place emphasis on the acquisition of applicable abilities in a dynamic and complex world (Dilekçi & Karatay, 2023). The objective is to prepare students for a world of technological advancement, globalization, social change, and employment success. According to Glassman et al. (2023) and Holman and Švejdarová (2023), these learning competencies place a strong emphasis on the development of a variety of abilities, including the skills of critical thinking and problem solving, collaboration, communication, and creativity and innovation.

Additionally, the competencies promote active participation and the use of technology as a crucial instrument for learning. The competencies consider evolving technologies as well as human interaction with information. The usage of digital devices, web apps, online learning platforms, and digital materials are all integrated into the curriculum as an aid for learning. Technological utilization promotes individualized learning, broadens access to educational resources, and improves the learning process through simulation, visualization, and deeper engagement. The contrast in the focus placed by teachers prior to and following the application of twenty-first-century learning competencies is shown in Table 2 in the form of questions (Jit Eng, 2017):

The application of twenty-first-century learning competencies helps students fulfill the aims and objectives of IRE, which include preparing them to become people of faith, knowledge, and noble character who can benefit humanity and society as a whole. This is done within the framework of IRE in KSSR and KSSM. In order to recognize their positions as God's servants and leaders while also gaining personal well-being in this world and the hereafter, students are encouraged to actively engage themselves in investigating the knowledge of *fard 'ayn* and *fard kifayah* (Tengku Kasim & Md. Yusoff, 2014). Incorporating twenty-first-century learning competencies into the IRE curriculum also encourages students to seek knowledge and wisdom as a part of worshiping God through problem-based learning and projects that extend comprehension and foster critical and creative thinking (Almazroui, 2023).

Additionally, the twenty-first-century learning competencies promote lifelong learning that involves the mastery of information, skills, and

Table 2 Comparison before and after the application of twenty-first century learning competencies by teachers

Before twenty-first-century learning competencies	*After twenty-first-century learning competencies*
How can teachers make the best possible use of textbooks, workbooks, and study guides as teaching and learning aids?	How can teachers employ a variety of technological and informational resources to carry out effective, high-quality, and current teaching and learning?
How can teachers help students master curriculum content when preparing for tests and public examinations?	How can knowledge (curriculum content) and competence (teaching and learning pedagogy) be updated to stay relevant to present and future needs?
How can teachers help their students master every ability listed in Bloom's taxonomy?	How can learning that promotes higher order thinking skills (HOTS) be provided?
How should behavior be managed when students are not paying attention to the teacher?	How can a classroom or learning environment be managed to be more dynamic?
How can teachers explain complex ideas and information in a way that students can absorb it the quickest?	How might genuine learning be used to prepare students for future employment and life?

Islamic principles in the context of IRE. In addition to obtaining direction from teachers who serve as facilitators, using technology to increase in-depth religious knowledge also helps people grasp these qualities. The twenty-first-century learning competencies also promote education for all in the context of IRE, eliminating all types of prejudices and unfair treatment from the educational process. Regardless of their social standing, cultural origin, or gender, every student has the right to a high-quality education (Kolb, 2023). This means that the twenty-first-century learning competencies component of teamwork requires all students to assist one another in discovering God's knowledge without gambling with all of their flaws.

In the context of IRE, the application of twenty-first-century learning competencies also promotes the growth of each student's individual potential in all areas, including academics, skills, and abilities. Students are urged to pursue their interests, hone their skills, and give back to the community. In accordance with this paradigm, students are not supposed to remain passive during the IRE learning process (i.e., to do more than just listen and take in the information without two-way dialogue

between students and teachers for brainstorming sessions). Additionally, the application of twenty-first-century learning competencies supports a comprehensive approach to education that includes the growth of one's intellect, spirit, social skills, and emotional stability within the context of IRE. An active learning strategy must incorporate knowledge of Islam, science, and practice in order to develop students who are well-rounded in all facets of life.

Transformation of IRE Teacher Training in Malaysia

In general, IRE teachers at the primary level are graduates of teacher education institutes managed by the Ministry of Education Malaysia, whereas IRE teachers at the secondary level are graduates of the Bachelor of Islamic Education or Bachelor of Education with Specialization in Islamic Education or Islamic Studies programs offered by several Malaysian universities. All such programs must be in line with the Education or Islamic Studies program standards established by the Malaysian Qualifications Agency (Bin Jamil, 2022). Based on both program standards, IRE programs should provide prospective IRE teachers with in-depth knowledge and skills to take on the appropriate responsibilities of guiding the society toward the correct understanding and implementation of Islam, simultaneously nurturing capacities of a high degree of professional and intellectual autonomy, adaptability, and versatility in teaching and learning. IRE graduates must have the basic capability to obtain knowledge independently according to the established principles of the discipline. They should also be imbued with moral and spiritual integrity on the basis of *Taqwa* [God consciousness]. In addition, IRE programs should provide advanced education and training with blended approaches that include managerial and administrative knowledge in operating educational institutions based on an understanding of the theoretical underpinnings of education. The programs should also produce skilled IRE educators who are able to confront the challenges faced during their experiences in teaching, managing, and supervising students by familiarizing them with relevant, appropriate, and significant research-based knowledge about different areas of education (Malaysian Qualifications Agency [MQA], 2013, 2016).

Here, we shall look at a specific instance of the IRE program provided by the *Universiti Malaya* through the Islamic Education Programme

at the Academy of Islamic Studies. At the moment, the *Sarjana Muda Pendidikan Islam (Pengajian Islam)* [Bachelor of Islamic Education (Islamic Studies)] and the *Sarjana Muda Pendidikan Islam (Pengajian Al-Qur'an)* [Bachelor of Islamic Studies (Al-Qur'an Studies)] are the two IRE undergraduate programs offered by the university that focus on developing IRE teachers (Hendek et al., 2022). In general, both programs are designed with the following objectives (Ibrahim et al., 2014):

1. To develop potential IRE teachers who apply their knowledge, methodologies, and moral values in the teaching and learning process in accordance with the IRE philosophy and current demands.
2. To develop potential IRE teachers with critical and creative thinking skills to tackle the difficulties of IRE teaching and learning.
3. To produce potential IRE teachers who are competitive and capable of meeting the difficulties of the IRE world.

These objectives are consistent with the *Universiti Malaya*'s vision and mission. The assessment and market requirements connected to the discipline of the IRE program are used in the creation and development of the teacher training curriculum. A curriculum committee was established at the level of the Academy of Islamic Studies to assess and design courses that are relevant to the current trends, aspirations, and demands of the national market and society. Furthermore, the developed curriculum must match the specified program criteria, as well as the wishes of stakeholders, in order to ensure that graduates' marketability is not compromised (Ibrahim et al., 2014).

Various authoritative parties' perspectives will be sought in order to provide a robust and relevant IRE curriculum. These include industry and employers, the Ministry of Education Malaysia, especially the Islamic Education Division, alumni, professional groups, and the general public. All changes in education policy that occur in Malaysia, particularly in connection to the national curriculum policy, are to be taken into consideration with regard to teacher training providers, including the *Universiti Malaya*. Therefore, IRE teachers at present should be exposed to the current implementation of the curriculum approach, which is the standards-based curricula of KSSR and KSSM. The parallelism between

these new curriculum changes and the training of prospective IRE teachers can help the ministry realize the direction of education in the twenty-first century.

The courses offered to students in both of the IRE programs at *Universiti Malaya* have five main components: (1) University Courses; (2) Faculty Core Courses; (3) Core Program Courses including a Practicum; (4) Specialization Elective Courses, and (5) Faculty Elective Courses (Ibrahim et al., 2014). The program doesn't have just courses that are educational in nature but also provides significant and relevant courses to satisfy the needs of broader employment markets. IRE students also learn important generic skills related to administration and management in IRE through courses such as Islamic Educational Administration, Sociology of Islamic Education, Guidance and Counselling Skills in Islamic Education, Psychology of Islamic Education, Information and Communication Technology in Islamic Education, and Creativity and Innovation in Islamic Education. These skills are capable of developing potential IRE teachers and preparing them for work in a variety of employment categories in addition to education. Soft skills and twenty-first-century learning abilities such as leadership, communication, collaboration, problem solving, and creative and innovative thinking are also interwoven into all courses.

The delivery method generally considers strategies and approaches that are compatible with the twenty-first-Century Learning Competencies, the climate of Industrial Revolution 4.0, and the aspirations of PPPM 2013–2025, which is concerned with the emergence of students who are capable of facing future challenges with solid knowledge and skills. In addition to lectures, IRE programs use such teaching and learning methods as tutorials, group discussions, presentations, teaching practice, case studies, problem-based learning, seminars with invited stakeholders, practicums, field work, debates, role play, simulations, self-learning, blended learning, fun-based learning, and project work. All of the procedures used are carried out either inside or outside the lecture halls.

As a result, the teaching and learning environment should be equipped with the most up-to-date technological facilities to allow IRE students to gain learning experience through various methods, in addition to various soft skills that are attempted to be instilled in the students. They are not only exposed to cognitive elements but must also apply practical matters, particularly those related to pedagogical abilities. Assignments are given to them in groups, mostly so that they can practice problem solving

and working in groups. Some of the teaching, learning, and assessment innovations are planned and implemented to enhance the competence and learning abilities of the twenty-first-century learning competencies in accordance with the demands of the new curricula. These innovations are summarized as follows:

1. Encouraging IRE lecturers and students to use and make teaching and learning aids out of recycled materials. The goal of this initiative is to foster the ability to solve environmental challenges, which is the primary emphasis of the sustainable development agenda.
2. Encouraging the use of mobile-based learning (M-Learning) among IRE lecturers and students, which involves a series of extended discussion sessions based on lectures or tutorials in a forum created using various applications such as WhatsApp and Facebook. This strategy can increase nonverbal communication abilities while also increasing verbal communication during physical lectures, such as discussion sessions and presentations.
3. Teaching IRE students how to use blogging as a preaching tool. In order to complete blog production projects, they are provided the space and media to enhance their creative and critical thinking skills. This will encourage them to embrace the idea of future education, which is technology- and online-based.
4. Encouraging IRE students to use Dropbox and Telegram applications to distribute materials and information instead of email or SPECTRUM, the learning management system (LMS) used by *Universiti Malaya*. This incentive combines their awareness of principles and ethics in IRE to the concept of *ta'awun* in Islam, which is mutual support between friends by sharing information through various applications.
5. Organizing workshops to help IRE students improve their self-esteem and teaching abilities. These workshops should highlight a variety of applications of twenty-first-century abilities in the context of real-world educational experiences. Speakers from the Ministry of Education Malaysia, professors from other universities, and teachers from public schools are among those who are invited. Students are expected to not only understand the theoretical concept of twenty-first-century learning competencies but also to gain a true picture from their school experience and hands-on activities.

6. Highlighting the method of presentation of assignments by using the concept of academic research posters as what has been taught to postgraduate students. Higher order thinking abilities are required by this method, as IRE students must not only design the content that will be included in the poster but also analyze, develop, and evaluate the academic research poster generated in group.
7. Holding a teaching reflection program focusing on individuals and groups or small groups after IRE students have completed their practicums. Collaborative skills are applied in the reflection program where individuals or groups will evaluate each other constructively. They are instructed in advance on how the peer evaluation procedure is done, with an emphasis on the form evaluation questions take (e.g., What are the strengths or privileges of this group in producing the assignments given? What are the shortcomings of this group in producing the assigned task? Give suggestions for improvement to this group on the task produced).
8. Actively using e-learning applications in the teaching and learning process. Electronic learning (e-learning) is a type of virtual learning. IRE students are also provided with hands-on training with e-learning software. This event has become significant as a result of what happened during the COVID-19 pandemic when virtual learning was used extensively. As a result, IRE students must be trained to the ideas and methods for implementing e-learning as much as possible.

In terms of assessment, the implementation of traditional or summative evaluations at *Universiti Malaya* has increasingly evolved from using pencil and paper to using authentic conventional assessments as one of the components in the implementation of twenty-first-century learning competencies (Ismail et al., 2023). Authentic assessments are used to improve IRE students' ability to solve a problem or issue in the context of real-world reality, particularly in the field of IRE. The assessment is also used as a formative evaluation that is carried out continually (i.e., throughout the lecture), as opposed to a summative assessment that only focuses on exams or tests after a lecture session has ended (Al-Basheer et al., 2015). Throughout authentic (i.e., continuous) assessments, lecturers will provide students the time and opportunity to

develop. Lecturers will then give feedback based on the students' performances (McArthur, 2023). Some examples of the feedback methods are:

1. Giving direct feedback after students deliver their presentations.
2. Ongoing meetings between lecturers and students to monitor their performances.
3. Visiting students' practicum sites.
4. Monitoring students' achievements through an academic advisory council.
5. Giving formal feedback regarding students' papers.

Prior to the COVID-19 pandemic, the evaluation procedure regarding teacher education had been traditional, with a focus on in-person assessments and classroom learning activities. Teacher evaluations consisted mostly of direct observations by lecturers, written tests, project work, and face-to-face interactions with students. This technique provides for direct communication and feedback exchange between lecturers and trainee teachers, as well as continual coaching and support.

However, with the emergence of the COVID-19 pandemic, teacher education has seen significant modifications to the evaluation method. The closure of educational facilities and the installation of social distancing measures compelled lecturers and trainee teachers to conduct online learning. In this setting, lecturers prioritize assessment digitization, with trainee teachers being assessed using online learning platforms or applications. Online assessments, electronic assignments, and digital projects are gradually replacing traditional face-to-face evaluation forms.

The transition to distance learning is also altering the way assessments are administered. Lecturers can conduct assessments via video conferences or give assignments online. Direct observations by lecturers have become more difficult. Technological concerns such as Internet connection issues and lack of devices must be addressed to enable fair assessment. In addition, the types of assessment have evolved, with a larger emphasis on digital skills, online project work, and open-book assessments. Lecturers must assess their students' understanding and skills in an increasingly digital setting. Awareness of emotional well-being is also vital, with examinations likely to cover psychosocial aspects and emotional concerns among students who may be affected by pandemic stress. This

transition underscores the significant issues that teacher education has in adapting and developing evaluations that are appropriate to the realities of online learning. Teacher education should continue to seek a balance among fair evaluation, relevance to technological improvements, and support for students' overall development in an increasingly digital learning environment.

In addition, online assessments offer exceptional flexibility and accessibility, allowing trainee teachers to take the evaluation at their own pace and location. As a significant element of online assessment, immediate feedback has enabled trainee teachers to learn the results of assignments that need to be improved right away, thereby dynamically strengthening the learning process. Various assessment styles, from multiple-choice questions to interactive quizzes, allow for a comprehensive assessment of trainee teachers' knowledge and skills. Furthermore, online evaluation tools provide useful analytical data to lecturers via online apps such as quizzes in Google Forms, Quizziz, and Nearpod. These applications provide quick decision-making information regarding the recruitment of trainee teachers. This also allows for a more in-depth analysis of student performance trends while also assisting in the development of better teaching tactics. Finally, when properly handled, online evaluations can make a major contribution.

Conclusion

In recent years, Malaysia's IRE curriculum has undergone major revisions in line with the global agenda of twenty-first-century learning competencies. These changes have not only affected the curriculum's content and structure but have also necessitated a paradigm shift in teacher education aimed at providing IRE teachers with the essential knowledge and skills for effective implementation. The curriculum modifications reflect a higher emphasis on critical thinking, problem solving, and communication skills, all of which are crucial components of twenty-first-century learning competences. For example, a renewed emphasis is found regarding using technology in teaching practices in order to increase student engagement and allow for interactive learning experiences. Interdisciplinary approaches are also encouraged in order to foster holistic comprehension and application of knowledge. These modifications are required to meet students' changing needs in an increasingly interconnected society. The incorporation of technology provides them

with critical digital literacy skills for future success. Furthermore, by using multidisciplinary methodologies, students will learn transferable skills that may be used in a variety of scenarios.

The curriculum reform must be aligned with IRE teacher education to ensure successful implementation and achievement of IRE aims and objectives in Malaysia for long-term growth. By providing IRE teachers with professional development opportunities aimed at improving their pedagogical knowledge and skill set in relation to twenty-first-century learning capabilities, they will be better prepared to provide high-quality instruction. This alignment also improves their ability to promote comprehensive student development, allowing them to create interesting and meaningful learning experiences for their students once they have gained excellent pedagogical expertise alongside deep IRE knowledge and twenty-first-century learning skills.

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Current Transformations in Turkish Education Policies in the Context of Global Agendas and Increasing Interaction in Education

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Globalization and the Background of Education Policies in Türkiye

Education policies have traditionally been produced within the authority of nation states, but the phenomenon of globalization has posed some challenges to policy-making based solely on the nation state. When countries realized in the 1980s that their own education systems were unable to respond to the global economic, technological, and social transformations, global education reforms came to the fore. Initially, difficulties were experienced when comparing the quality of existing education systems, as global data was insufficient and unreliable, so the motivation to reform education systems came primarily from national studies

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and research projects (Sahlberg, 2016). The foundations of today's policies can be traced back nearly three decades to the educational reforms introduced in the United States, Chile, and the United Kingdom. Education reform movements have generally been driven by standardization, narrowing curricula to focus on core subjects, knowledge, accountability, and institutional management practices (Fuller & Stevenson, 2019). These basic assumptions of education reforms, supported by international development organizations, consultants, philanthropists, and private organizations interested in education policy, soon became influential in shaping education systems in other countries (Sahlberg, 2016). Thus, globalization has resulted in the policy influence of some international organizations such as the United Nations (UN), the European Union (EU), the World Bank, the Organisation for Economic Cooperation and Development (OECD), and the International Monetary Fund (IMF), with policy options for nation states having naturally been shaped by the constraints of these actors (Al'Abri, 2011).

The UN's Sustainable Development Goals, which set the framework for countries' education policies, currently aim to increase the quality of education by 2030. The global goals cover a wide range of issues such as ensuring access to quality vocational and technical education and higher education, increasing the number of young people and adults with other skills including technical and vocational skills for entrepreneurship, equipping students with the knowledge and skills needed for sustainable development and sustainable lifestyles, world citizenship, cultural diversity, international cooperation, and a supply of qualified teachers. On the other hand, these global policies have been extended to the least developed and developing countries by providing scholarships for enrollment in higher education, including various programs (vocational education, information and communication technologies, technical, engineering, and scientific programs) in other countries (UN, 2022). In the Turkish education system, global policies are constantly on the agenda regarding how to measure and improve the quality of education in the context of students, educators, and educational institutions, and planning studies in this context continues (Göksoy, 2020). As a matter of fact, Türkiye has followed a process in line with global policies, using the important steps it has taken to improve the quality of education since the 2000s and supporting the process with higher policies. In the successful continuation of the country's economic and social development, emphasis

has been placed on the strength of human resources, innovation, technological infrastructure, and international cooperation. The fact that the 2019–2023 Strategic Plan presents a perspective on economic, social, and cyclical developments both in the world and in the country is a concrete indicator of this (Presidency of Strategy and Budget [SBB], 2021).

In the 1980s when global influences were more palpable in every field, Türkiye's 5th Development Plan (1985–1989) included issues that were both on the national and international agenda, such as technical education, qualified workforce, the content of education programs, and the expansion of private schools (Akça et al., 2017). In this context, various studies that have been carried out so far in the Turkish education system such as updating curricula, twenty-first-century teacher and student profile studies, the FATIH Project,[1] Turkish Qualifications Framework (TQF), and 2023 Education Vision Document were implemented as a reflection of the global education paradigm (Hamarat, 2019). Various improvements and developments in the education system were attempted in order to find solutions to existing problems, but international evaluations of these activities weren't first put forward until 2003 in the OECD's Program for International Student Assessment (PISA) studies. The 2003 PISA results provided important clues for the measures to be taken in terms of the deficiencies and weaknesses of the education system. Subsequently in the 2005–2006 academic year, the curricula for grades 1–5 were revised, and a cognitive and constructivist approach was adopted from the behaviorist approach of the existing curriculum (Çelen et al., 2011). Another important change was the transition from eight years of uninterrupted basic education to 12 years of compulsory education with 4 + 4 + 4 in the 2012–2013 academic year. These changes aimed to increase the length of education of the society and to provide the guidance required by individuals' interests, needs, and abilities (Başdemir, 2012). Some of the first practices that can be shown related to the reflections of the globalization process on education are the SOKRATES and COMENIUS programs within the scope of the European Union Education and Youth Programs. These programs generally aimed to increase international cooperation among schools, language learning, and cultural exchanges in order to facilitate harmonization with the European Union. The International Baccalaureate Diploma Program (IBDP), a two-year

[1] Movement for Increasing Opportunities and Improving Technology.

preparatory program for higher education, was first introduced in some schools and spread from private to public in line with the increasing demand for this globally reliable and respected program (Sever et al., 2018). Subsequently within the framework of the 11th Development Plan and the 2023 Education Vision, global concepts such as equal opportunity, gender equality, lifelong learning, and human resources were taken into account, and efforts were made to expand access to education through activities to increase participation in education levels before and after basic education. Access to early childhood education (ECE) and pre-primary education one year before primary school has been the focus of this policy for most of the last decade, with a number of measures taken in recent years (OECD, 2022a).

The new education paradigm changing with globalization emphasizes the change in professions and that change requires new skills (Hamarat, 2019). The global economic crisis in the world in the early 2000s directed the attention of the EU to vocational education, especially in solving the employment problem. In Türkiye, various projects were carried out in these years in order to modernize vocational education and harmonize it with EU countries (Günay & Özer, 2016). Until the 2000s, however, studies on vocational education were generally focused on the training of qualified manpower and the expansion of educational institutions and were insufficient to meet the needs of labor markets (Ekşioğlu & Taşpınar, 2019). As a matter of fact, government policies in Türkiye were seen to take into account global trends within the framework of the country's needs, such as training qualified manpower; developing educational environments, human resources, and curricula; and ensuring the relationship among education, employment, and production in the high goals set forth in vocational and technical education (VET) through the 2023 Education Vision (Ministry of National Education [MEB], 2018).

Different expectations from education clearly exist in the face of rapid technological developments in the world today, so quality education is a current issue that needs to be constantly considered within the framework of technological changes. In many countries, the role and function of schools are changing, and teachers' current roles are being affected by these changes. Traditional classroom environments are evolving into multicultural classrooms where information and communication technologies are used more effectively, students with special learning needs are integrated into these classrooms, planning is done with accountability, and so on. In response, education systems now provide a variety of in-service

training opportunities for teachers to improve their professional competencies and thereby maintain and improve the quality of higher education (OECD, 2009). However, the staff in schools is an important resource for education systems, both educationally and financially, and human resource policies in schools need to be rethought. The OECD examined the policy environments that support professional development in participating countries through the "Professional Development of Teachers" study.[2] In this framework, countries' strengths, challenges, and innovations have been explored in order to provide policy makers with rapid feedback and evidence and to facilitate peer learning (OECD, 2020). In other words, all countries' efforts are limited in practice to the success of teachers and educational administrators and the extent of their competencies (MEB, 2018). Recognizing that improving the quality of education depends to a large extent on teachers' professional development, one important step taken recently in this regard is the recognition of teaching as a career profession through the Professional Development Law enacted in 2022.

This chapter evaluates VET and teachers' professional development within the scope of globalization policies, access to education, VET and human resource development policies, and the prominent activities in Türkiye in recent years in the fields of ECE. However, the article does not explain why these policies were constructed and placed on global agendas, instead drawing attention to the transfer of these policies within and between countries through the case of Türkiye and presenting the current education reforms in the country in this context.

Access to Education Policies: Early Childhood Education

The diversity and increase in social problems as a result of globalization has made nations' ability to survive harder, and the solution to somehow cope with global threats has been to reduce the provision of education to earlier ages (Moss, 2015). Indeed, based on the fact that early childhood education and care (ECEC) plays an important role in children's cognitive and emotional development, learning and lifelong well-being (MEB, 2018; OECD, 2022a), ECEC has started to occupy an important

[2] Teacher Professional Learning (TPL).

place on the global policy agenda. In the context of equal opportunities, though, ECEC policies also emphasize the creation of opportunities for socioeconomically disadvantaged children to develop their cognitive and emotional skills (OECD, 2022a). ECEC policies intersect with social policies (e.g., poverty eradication), immigration policies (e.g., managing ethnic diversity), and other education policies (e.g., closing the education gap), including economic policies (Vandenbroeck et al., 2010). To remain in the race for global employment and economic advantage in the twenty-first century, countries today focus on equipping each individual from the very beginning of life with the basic skills to realize their potential (Moss, 2015).

Research on ECE and child development has demonstrated the critical importance of quality early learning environments (OECD, 2022a). According to experts, children acquire a variety of linguistic, cognitive, social, and emotional skills during ECE that regulate many functions of later life domains (Bakken et al., 2017). However, the likelihood of children receiving an education before starting formal schooling has been found to be low across the globe, such that socioeconomic gaps in human capital occur before children even start formal schooling. Furthermore, access to ECE is considered a key challenge not limited to low-income countries, and interest is found in having global policies expand formal learning, starting with preschool-aged children (Cascio, 2021). The social and economic context of ECE gave impetus to policies in this framework in the last half of the twentieth century. Thus, ECE has become a topic on the agenda of nations, international organizations, political classes, and policy experts (Moss, 2015). The international organizations leading the production and dissemination of these policies are the World Bank, OECD, and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The United Nations Children's Fund (UNICEF) plays an important role in policy support efforts by providing on-the-ground contributions. Non-governmental organizations (e.g., Save the Children) are also involved in ECEC activities (Mahon, 2016). In Türkiye, similar activities are carried out by the Mother Child Education Foundation (AÇEV).

As the 4th Sustainable Development Goal, ECEC emphasizes the importance of having national and international policies "ensure that all girls and boys have access to quality early childhood development, care and preschool education so that they are ready for primary education"

(UN, 2022). This goal calls on the world to provide "inclusive and equitable quality education" and aims to meet children's health, nutrition, protection, and education needs, especially for children with disabilities, and to provide inclusive, accessible, and integrated programs, services, and quality infrastructure for early childhood (UNESCO, 2022). The indicator of the sustainability goal of "ensuring early access to quality early childhood development, care, and education" measures the percentage of children enrolled in organized learning participation (i.e., ECE or primary education) one year before the official starting age of primary school. According to the OECD (2022a) report, children's participation in ECE in the year before primary education is above 90% in most OECD countries. However, significant differences were noted to occur between countries. For example, this value ranges from around 80% in Australia and Türkiye to 100% in Colombia, France, Ireland, Mexico, Portugal, Switzerland, and the United Kingdom (OECD, 2022b).

In Türkiye, ECE has been a topic emphasized in top policy documents (e.g., national development plans, education policy documents, and strategic plans) since the 1990s. In the 2000s, the goal of "providing at least one year of early childhood education" for every student was set, but no significant progress was made in ensuring access to ECE until the 2010s (Suna & Özer, 2022). In Türkiye, ECE has been supported by some changes in the general education system (e.g., extending the duration of compulsory education, providing and improving educational infrastructure), and a significant increase in access to ECE has been observed since the 2013–2014 academic year apart from the COVID-19 period (MEB, 2022). In line with the targets set in the 2023 Education Vision, MEB prioritized ECE among its policies for 2021–2022. Subsequently, MEB's many project- and program-related efforts resulted in a significant increase in access to ECE in the 2021–2022 academic year (Education Reform Initiative [ERG], 2022). The most prominent efforts to increase access to ECE in Türkiye have been the regulation of the criteria for opening kindergartens, the opening of new kindergartens and preschools, and new teacher appointments (Turkish Education Association [TEDMEM], 2022). In 2021, MEB launched a nationwide campaign with the slogan "at least one year of early childhood education for every student" to draw public attention to ECE. As part of its goals to reach the OECD average regarding ECE, it completed the physical infrastructure gaps and increased the number of kindergartens

in 2022, exceeding expectations in schooling rates for children aged 3–5 years. Thus, the ECE policy campaign MEB launched in 2021 has been successful in achieving the goal of access to education by age 5. MEB's target for 2023 is to increase the enrollment rates of 3- to 5-year-olds by providing the necessary infrastructure support and to reach 100% in the 5-year-old age group (Özer & Suna, 2022).

Some statistical data confirm that Türkiye in recent years has set a vision in line with OECD countries in terms of educational access from basic education to ECE and has pursued active policies in this regard. Accordingly, at least 90% of the population in 2020 had participated in education by the age of 6, which is the minimum age for compulsory education in Türkiye. Another important indicator is that the share of children aged 3–5 enrolled in ECE in Türkiye had increased by 29% between 2005 and 2020, substantially approaching the 2030 national targets (OECD, 2022b).

Vocational and Technical Education Policies

As a result of globalization, economies operate in a global marketplace and have become highly interdependent. Therefore, economic units need to move out of their current state and achieve standards that will enable them to succeed in global environments. However, rapid global change challenges organizations that provide production and services regarding decisions and practices in management, employment, and business processes (Hobart, 1999). Being seen as an important pillar of the economy in this context, education has been associated with the factors of economic growth, innovation, sustainable employability, and social cohesion. The world has linked one of the conditions for being more successful in global economic competition to advanced and effective vocational education systems, and the EU's competitiveness policies have built on this by pointing out that VET will lead to greater productivity and innovation. Attention has been drawn to how continuous improvement of vocational education and training facilitated vocational integration and reintegration into the labor market, thus ensuring adaptation to industrial changes (EU, 2010). Following these developments, MEB has identified increasing access to VET as a policy priority in Türkiye in recent years (Özer, 2018). With the 2023 Education Vision, MEB has taken the necessary steps to improve education in line with global policies

and promoted VET through systematic and multifaceted improvements (Özer, 2021).

These days, rapid advances in technology and transformations in labor markets place different expectations on education for the employment of skilled workers. Education systems have an exponential mission to train individuals equipped with different skills, such as the ability to generate solutions to defined or emerging problems and design thinking using technology for occupations that have not yet emerged in the workforce (Lehner & Wurzenberger, 2013). Indeed, the 2023 World Economic Forum (WEF) estimated that 70% of the new value created in the economy over the next decade will be based on digitally enabled business models, and 44% of workers' skills will be disrupted in the next five years (WEF, 2023). In the 11th Development Plan, Türkiye is preparing for global transformations with its policies that support meeting the need for the skilled manpower sectors demand in its goals of strengthening the link between VET and labor markets. In this context, the Workplace Vocational Training and Development Program (İŞMEP, 2018–2025), initiated by the International Labour Organization (ILO) Türkiye, continues to acquire and develop vocational skills on the job, close skill gaps, and contribute to meeting employers' need for a qualified labor force. Türkiye has also set important targets for updating vocational education programs in line with sectoral demands and technological developments, supporting students' innovative initiatives, and updating and increasing the number of national occupational standards and qualifications (SBB, 2019).

Policy makers initially viewed VET as a solution to the problematic transitions to the world of work due to rising youth unemployment and school drop-outs, but VET has been criticized for not being compatible with the new technological content and flexibility of the world of work. Although different practices occur regarding vocational education around the world, some studies have shown that the conversion to social benefit is highest when vocational education is designed as a dual system combining school and work (Forster et al., 2016). On the other hand, designing vocational education programs purely from the perspective of labor markets assumes that graduates will ideally demonstrate high productivity rates throughout their working lives. But when taking the overall outcomes of education into account, vocational education is expected to have a broader function than simply supporting the labor market. For example, a law was enacted in the Netherlands to

recognize the importance of both the theoretical and practical outcomes of a quality education for professions. Accordingly, vocational education should not conflict with general education, which contributes to the personal and social development of students. Instead, they should each be an extension of the other (Coenen et al., 2015). Although contemporary vocational education is evaluated according to global criteria, it is seen to be designed primarily to respond to the needs of the country, and Türkiye carries out its initiatives on vocational education with a parallel approach focused on the country's problems within the framework of globalization (OECD, 2022c). In this context, the attempt is being made to organize and develop vocational education in Türkiye in a way that will meet the needs of labor markets. In the vocational education provided by vocational and technical high schools, two different programs (i.e., vocational and technical) are implemented. While the technical program is academic and theoretically oriented, the vocational program offers a more profession-specific and applied education. The academic-oriented program aims to increase the quality of manpower by ensuring that graduates continue to higher education. The priority of the vocational program is to meet the needs of the labor market for qualified technical staff. In Türkiye, graduates of both programs have the title of technician, the authority to open a workplace, and the EUROPASS certificate; they can also attend a higher education program. Vocational training centers operating outside formal education provide traditional apprenticeship, journeyman, and mastership training. Graduates of these trainings have gained applied vocational knowledge in workplaces rather than theoretical knowledge (Özer, 2018, 2020).

In the face of global changes, how to ensure the continuity of the competencies initially acquired through vocational education is currently seen as one of the main problems. Vocational education is beneficial at the beginning of a career, but can be disadvantageous later in a career (Hanushek et al., 2017). In other words, individuals are not able to transform the vocational skills they acquire early in life to adapt to changing environmental conditions in later life or to be flexible (Forster et al., 2016).

Another controversial issue is the wage differences between vocational and academic employment. Although vocational education graduates initially have an advantage in terms of employment, the wage advantage in the early stages of their careers is observed to decrease over time and

turn in favor of academic education graduates (Özer, 2020). To summarize, common problems have been identified around the world within the framework of vocational education; however, these problems are felt less in countries such as Finland and New Zealand, which construct vocational education as part of the general education system, while felt more in countries such as Germany, which constructs it with an employment approach. In this respect, Germany's dual model forms an important pillar of the political economic debate on vocational skills development. The model has supported the training of skilled workers from its inception with strategies to develop a wealth of quality output and represents one of the most important areas of corporatist governance (Baethge & Wolter, 2015). The main problems of vocational education in Türkiye have been identified as absenteeism, low academic achievement, grade repetition, and dropping out of school, which are found to be similar to many other countries around the world (OECD, 2022c). Subsequently, MEB conducted interviews with the business world, sector representatives, vocational education institution managers, field teachers, and students and benefited from international reports and research in order to examine the issue in more depth and to develop solutions (Özer, 2020). MEB started its efforts to improve the country's vocational education by first reviewing its collaborations with sector representatives. The scope of the collaborations was expanded to include joint planning of curricula and practical training of students in enterprises, teacher training with the support of sector representatives, scholarships for successful students, and prioritizing employment (Özer, 2022). In addition to improving the infrastructure of vocational education, MEB's efforts to improve access to vocational education have focused on changes in the delivery of vocational education to facilitate access, particularly for the most disadvantaged. Data on the significant improvements in vocational education in Türkiye in recent years is also noteworthy, with around 36% of 17-year-olds being enrolled in vocational education in 2020, which is above the OECD average of 31% (OECD, 2022b).

According to the results of international exams, achievement gaps are a problem that all countries face to varying degrees and are discussed within the framework of egalitarian education policies. In 2020, MEB launched the 1000 Schools in Vocational Education Project with the slogan "The Future is in Vocational Education" in order to expand the developments in vocational education to all vocational schools and reduce the achievement gaps between schools. This project aimed to focus on

schools with low academic achievement and to make improvements in each area, including students, teachers, administrators, parents, and the school environment (Özer, 2021). As a result of MEB's initiatives and determined efforts, the social perception of vocational education has changed positively, and successful students' interest in vocational education has increased. In 2022, MEB moved the importance it attaches to vocational education to an international dimension by establishing international vocational high schools. As of 2023, these high schools started to provide education to students from Albania, Bulgaria, Kosovo, North Macedonia, Serbia, and Bosnia and Herzegovina (Özer & Suna, 2022).

Human Resource Development Policies: Professional Development of Teacher

Arrangements for the definition and duties of school staff are considered within human resources policies in the context of careers, staff distribution, and professional learning. OECD reviews have identified a number of common challenges in participating countries regarding the design and implementation of human resource policies. Traditional professional development systems are said to support the continuous development of those who learn in schools, but these are often insufficient, as highlighted by a 2018 survey of OECD countries. Accordingly, 94% of teachers reported having participated in professional development in the past year, but only 82% felt that it had improved their teaching (OECD, 2019).

Knowledge, intelligence, know-how, and innovation form the backbone of human resources and are currently of particular importance for competitive societies focused on new technologies and production processes. Therefore, ensuring the innovative development of the state economy requires the training of an innovative workforce and, accordingly, the support of professional development with the ability to work creatively (Yaroshenko et al., 2020). Recognizing the fundamental role of education in the innovative perspective, global policies call for teachers' professional development. Because professional development is also considered a lifelong learning process, opportunities and incentives for teachers' professional development are expected to be created even after they have completed their initial professional training. In this way, the knowledge built on initial professional training will be updated throughout the career, and students' learning will be supported from an innovative perspective (OECD, 2017).

Due to education in the globalized world being evaluated by international exam results, quality education is considered to be an outcome of teachers' professional development. Therefore, one of the main topics of educational debates currently is how teachers can acquire the professional skills that can help them make changes in teaching. Across the world, professional teacher development activities range from seminars, conferences, workshops, and distance learning to professional support such as mentoring and supervision (Martin et al., 2017). These intensive activities related to professional development essentially serve to make teaching a respected career choice just like other popular professions with a longer education process (Sahlberg, 2013). Different country examples are found regarding the relationship between the way professional development activities are offered and the achievement outcomes that are acquired. For example, although Finland has no systematic activities for professional development, teachers' ethical values and motivational attitudes have been important factors in their career planning that have also translated into high achievement outcomes (Akyol et al., 2020). In Japan as another country that stands out with its success in education, systematic and continuous in-service trainings are offered to teachers, and universities contribute to in-service trainings through postgraduate education institutions (Abazoğlu, 2014; Akyol et al., 2020). In Türkiye, professional development activities for teachers are generally carried out centrally by MEB. In this context, planned in-service training activities are provided with the contributions of central and provincial organizations and universities, as well as from various institutions, associations, and non-governmental organizations (Demir & Demir, 2021). In reference to the importance of professional development, teachers are understood to be the objects of quality education policies, and in this context, teaching is recognized as the agent of the change policymakers desire (Wixson & Valencia, 2011).

The idea that professional development can support improvements in teaching is now widely accepted, and professional development occupies an important place in the education policy of almost every country. Teachers with quality professional development are assumed to be able to provide superior teaching that will translate into high-achievement outcomes; in other words, they will increase the capacity to improve student outcomes (Hochberg & Desimone, 2010). Despite this widespread view of the importance of professional development,

little consensus is found on what should be done within this framework, how teachers should be incentivized, or what kinds of changes are expected (Kennedy, 2016). Significant structural problems have also been associated with the phenomenon of professional development in teaching. These include the way training is delivered, its duration, and the collaboration that takes place (Garet et al., 2001). Similarly, various criticisms have been made about in-service trainings offered to teachers in Türkiye. The main issues that have come to the fore in these criticisms are the compulsory nature of in-service trainings, the fact that centrally determined topics do not respond to local educational needs, budget constraints, the lack of sufficient support from higher education institutions, the general negative perception of in-service trainings, apathy and reluctance, and the positioning of teachers as passive practitioners in the education system (Bümen et al., 2012).

A review of research on professional development in teaching reveals that teachers' expectations from professional development are grouped under several main themes (Matherson & Windle, 2017). Accordingly, teachers want professional development-learning opportunities that are interactive, engaging, and relevant to their students; that show them a more practical way of delivering content; and that are teacher-driven and sustained over time. However, since 2020, digitally supported distance learning and online learning environments have increased exponentially compared to previous years, significantly changing the traditional view of education delivery. Effective teacher professional development and learning delivered online have clearly become an integral part of the global education landscape (Bragg et al., 2021). Subsequently, MEB introduced a new approach to teacher professional development in 2021. This approach has had two important benefits for the Turkish education system. The first is the empowerment of school administrations by providing schools with budgets to meet teachers' training needs. The other is that teachers' views are taken into account when determining and enriching the content of in-service trainings. In this way, the aim is both to increase physical participation in in-service trainings, for which significant budgets have been allocated, and to create the infrastructure of a Teacher Information Network with the developed materials. Another important development for the teaching profession in Türkiye is that professional development was made an independent law in 2022. This law sets out career paths in teaching and the conditions for professional development. According to the law, experienced teachers will be

able to receive the titles of expert teacher and head teacher after successfully completing training programs. However, while teachers' rights in Türkiye have been significantly improved, the OECD's statement of "limited improvement in personal rights from the beginning to retirement" has also been exceeded (Özer & Suna, 2022).

Conclusion and Evaluation

While globalization was initially a phenomenon limited to the economy, it soon affected all social spheres and has currently become even more palpable with the rapid developments in technology. Globalization has emerged as a broader concept different from previous social eras such as the nuclear age, industrial society, or postmodernity. Indeed, this process has forced nation states to conform to certain standards and education to be constantly on the agenda as an issue at the center of transformation.

Globalization has multifaceted and multidimensional effects on education policies. Under globalization, international interaction has strengthened, and nations have had to rethink how to set educational agendas and make policies. In this regard, thinking about whether domestic dynamics or international political transfers shape the educational reforms of nations may be necessary. In fact, globalization has confronted nations with the question of how to be better than other nations. However, global developments are forcing nation states to create a sustainable competitive economy, and global policies are currently making their impact felt in every field. As a matter of fact, nations that do not want to fall behind in global competition do not consider their education policies independently from their economic policies. In other words, education has become a critical tool for nations to position themselves in the global economy.

The development of human resources, lifelong learning, equal opportunities, and gender equality are at the heart of global policies' building of stronger economies. In these contexts, every society has experienced the phenomenon of globalization to different extents, but the world is becoming ever more innovative, and nations will face different challenges. Nations have recognized that the secret to success in coping with change lies in improvements at the most fundamental level: education systems. Education systems are being redesigned from their traditional approaches to focus on the skills required by the age, and in this context, access to education, vocational training, and professional development are gaining importance.

Türkiye has experienced the effects of globalization in parallel with other countries and taken global goals into account in its educational policies in order to improve its education system. However, although many transformations have taken place in the Turkish education system over the years, recent activities have been carried out from a more holistic perspective. Data reveal that significant progress has been made in increasing access to education for students of all ages since the early 2000s. In an innovative world, the aim is to ensure access to education at an early age so that each person's potential can be discovered at the earliest possible stage. Through its investments in ECE, MEB has sought to address the global challenges of equal opportunity and gender equality, while at the same time aiming to increase the length of time a person remains in education.

When addressing education, the first thing that usually comes to mind is that it is primarily academic, but as global conditions change, the value of vocational education is becoming increasingly recognized. The world's new labor markets focus on vocational and technical skills, and the need for workers with quality vocational education is increasing. Türkiye has a long history of vocational education, yet for many years vocational education has not received the same recognition there as it has in the rest of the world. Vocational education has often been a gateway for those who have not succeeded in academic education or who want to shorten the education process and enter life. Once the world realized that the theoretical knowledge that comes with academic education alone is insufficient in business life, vocational education began being reemphasized. Türkiye has taken the successful models of vocational education, which combine both academic and vocational knowledge, as an example and improved its cooperation with labor markets. Efforts to strengthen vocational education in Türkiye will be highly beneficial in achieving sustainable and inclusive goals.

In research, quality in education is often associated with quality schools that are often characterized by exam success and international education programs. However, the success of a country's education system is an indicator of the extent to which global educational goals are being met in international exams. In this respect, the professional development of teachers is seen to improve in successful education systems around the world through quality in-service trainings, with the teacher being positioned at the center of a quality education. In this regard, the fact that the teaching profession has a law in Türkiye is both an example in

terms of career development and an important step in terms of increasing quality. In fact, education, which has become a focus in order to be successful economically, will only have as high a quality as the competencies of its teachers. In this respect, the importance given to professional development in teaching should be maintained.

In reality, all education policies are based on the assumption that students within an organized education system will acquire the necessary competencies to be successful in their future personal and professional lives. All the goals set by education policies are primarily an effort to prepare young people for the world of the future through education. On the other hand, quality education is believed to form the basis of the strong economies of the future. In this context, this study recommends that developing nations closely monitor global goals and be consistent in their determined policies, both now and in the future.

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Axes of Internationalization in Education: Accreditation, Mobility and Diversity

Gulf Countries' Vision of Internationalization in Higher Education: A Comparative Analysis

M. Hüseyin Mercan

Introduction

The ruptures and developments in the global system over the last two decades have led countries worldwide to make breakthroughs in different fields to gain a more influential position in international relations. The transition from the international system of the Cold War era shaped around two main power axes to a multidimensional and multilayered order has transformed interstate relations into a more complex and interconnected system than ever before.[1] With the impact of globalization, traditional diplomacy has been replaced by an active multidimensional approach to diplomacy, which has necessitated that states determine a new road map in many areas such as education, art, culture, sports, religion, and civil society.

[1] The multilayered structure of the system and the actors' new levels of relationships can be seen in Amitav Acharya's conceptually insightful text (Acharya, 2017).

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The realization that soft power elements in international relations make a visible contribution to states in terms of creating spheres of influence and pursuing decisive policies has resulted in many strong and weak actors paying more attention to the development of this field in recent years. Soft power priorities, which vary according to the historical mission, cultural richness, and economic capacity of states, have started to shift toward the field of education with the rise of the internationalization trend in higher education all over the world. States trying to invite more international students through scholarships and other opportunities consider the internationalization of higher education as a strategy that will have positive effects in the coming decades. Notably, states with a solid economic capacity have taken more serious steps toward internationalization in higher education in recent years. In this respect, the vision and policies of the Gulf states (i.e., Saudi Arabia, United Arab Emirates, Qatar, Kuwait, Oman, and Bahrain) regarding the internationalization of higher education in recent years occupy a significant place in parallel with these countries' attempts at repositioning themselves in the international system.

The increasing trend of internationalization in higher education due to the acceleration of systemic transformation and the need for alternative ways in education, especially due to the new situation caused by the COVID-19 pandemic, has offered many countries' new opportunities regarding digitalization. Many countries that aim to attract more students worldwide by creating robust digital infrastructures in education are thus trying to gain an advantage in terms of playing a more influential role in international relations. From this point of view, the current chapter will refer to the literature on soft power and internationalization of education and discuss the Gulf states' vision of internationalization in higher education and what steps they have taken in this regard.

Soft Power and the Internationalization of Higher Education

Soft power refers to the ability to indirectly make another actor or state do what is wanted as opposed to the ability and capability to get what one wants by using carrots and sticks directly through military and economic

power. Soft power is based on "the ability to shape and change the preferences of others" (Nye, 2004, p. 5).[2] In international politics, soft power stems from the values a state or organization expresses in its culture, policy examples, and relations with other states or organizations (Nye, 2004, p. 8). However, a state has three primary sources of soft power: culture, political values, and foreign policy. In this context, states that have universal and pursue policies aligned with these values are more likely to influence and attract others through soft power. High culture elements that appeal to the elite, such as literature, art, and education, as well as popular culture tools that focus on the entertainment of the masses, similarly express the role of culture in a state's soft power. Here, tools such as trade, personal contacts, visits, and exchanges are instrumental in making a country's culture known to the citizens of other countries (Nye, 2004, pp. 11–13).

This is precisely the context in which the relationship between soft power and higher education should be emphasized. Nye, who first introduced the concept of soft power, stated that higher education is essential for a state to increase its soft power. In this regard, American higher education institutions are noted to have significantly increased the USA's soft power (Nye, 2005, p. 13). Students from many countries enrolled in undergraduate and graduate programs at the US universities have become familiar with American culture and brought it back to their home countries. These students have held important political, economic, and social positions in their home countries and contributed positively to their countries' relations with the USA (Nye, 2004, p. 13). Colin Powell, former US Secretary of State, expressed this in a 2001 statement: "I can think of no more valuable asset to our country than the friendship of future world leaders who have been educated here" (Nye, 2005, pp. 13–14).

Historically, the relationship between soft power and higher education can be traced back to the Middle Ages when universities first emerged. During this period, the various Italian universities in Europe and the Sorbonne University in Paris significantly influenced intellectuals on the rest of the continent. The mobility of students and scholars across the continent reflected the character of the universities and paved the way for Latin to become the leading academic language on the continent. Similarly, the exchange and mobility between Greek-speaking Byzantine

[2] "Soft power rests on the ability to shape the preferences of others".

scholars and scholars of Arabic culture is another example of the situation in the Middle Ages (Wojcik, 2018, p. 343). The academic and cultural exchanges between the USA and the Soviet Union during the Cold War played an important role in increasing the soft power of the USA (Nye, 2005, p. 14). Similarly, the Confucius Institutes of the People's Republic of China (Yang, 2010) as well as Oxford's Rhodes Scholarships, which aim to spread British values throughout the world, have also played an essential role in increasing the soft power of these countries. Since 1946, the Fulbright Program, which has provided higher education scholarships to 400,000 students from 150 countries, can be shown among the basic soft power tools. In the Soviet Union, Patrice Lumumba University was an institution that aimed to spread communism and Soviet ideals to third-world citizens and thus had contributed significantly to the Soviet Union's soft power. Australia's Colombo Plan and the European Union's Erasmus+ Program are other examples of soft power practices in foreign policy and higher education (Gallarotti, 2022, p. 496).

On the other hand, the so-called International Branch Campuses (IBCs), which are based on the idea of Western universities opening campuses in other countries, can also be evaluated in the context of the relationship between soft power and higher education. The number of such campuses, particularly in countries such as Qatar, Dubai, and Singapore, exceeds 230 worldwide. The USA, the United Kingdom, Russia, France, and Australia are at the forefront of opening branch campuses in other countries. In addition to Western countries, China, Malaysia, Chile, Mexico, Lebanon, Estonia, India, Iran, Pakistan, the Philippines, and Venezuela are among the countries that have opened international branch campuses. As mentioned earlier, Qatar, Dubai, and Singapore are also among the leading importers of such institutions (Wojcik, 2018, p. 345).

Meanwhile, the relationship between higher education and soft power is not only about the cultures, values, and policies of states but also about the structure of the international education system, which consists of international educational norms, rules, and institutions. For this reason, states must be able to create international norms and regulations (Li, 2018, p. 7). However, only education systems that meet the requirements of the innovative high-tech economy can create a center of attraction for international students and increase a country's soft power. For this reason, the modernized and internationalized education systems include education systems that meet the modern economy's basic requirements,

as well as the requirements of innovative high technology, and are integrated into the international education field and the global scientific world (Ostashova, 2020, p. 260). Universities that have become centers of attraction for international students are at the top of international rankings. In addition, a country's expenditures on education, research, and development and whether the distribution of these expenditures within the country is equal or not, as well as the number of students in the country, also cause universities to become centers of attraction for international students (Antonova et al., 2020, p. 34).

Internationalization of Higher Education

The impact of globalization in making higher education an essential tool for states in today's international relations cannot be ignored. Still, Altbach (2004) indicated confusion exists between globalization and the internationalization of higher education. According to him, globalization should be defined as the broad economic, scientific, and technological trends that directly and inevitably affect higher education (Altbach, 2004, p. 5). Internationalization includes "specific policies and programs undertaken by governments, academic systems and institutions, and even individual departments or institutions to cope with or exploit globalization" (Altbach, 2004, p. 6).

The internationalization strategy in higher education is supported through specific rationales and motivations by governments and institutions that have an agenda. In a report on the internationalization of higher education prepared for the International Association of Universities in 2003, Knight categorized the reasons for internationalization under the following 12 headings in order of importance (Knight, 2003, p. 8):

1. Mobility and Exchanges for Students and Teachers
2. Teaching and Research Collaboration
3. Academic Standards and Quality
4. Research Projects
5. Co-operation and Development Assistance
6. Curriculum Development
7. International and Intercultural Understanding
8. Promotion and Profile of Institution
9. Diversify Sources of Faculty and Students
10. Regional Issues and Integration

11. International Student Recruitment
12. Diversify Income Generation

In addition, Qiang, one of the essential contributors to the relevant literature, divides the reasons for promoting and expanding the internationalization of higher education into four categories based on political, economic, academic, cultural, and social reasons (Qiang, 2003, pp. 252–254). The political rationale is mainly related to governments' use of internationalization in higher education as a foreign policy instrument. In contrast, economic reasoning is associated with developing goals that will contribute positively to many areas, from access to competent human resources and international competition. The most important contribution of internationalization in the academic field is that it will positively affect the spread of an education system that meets international standards and increases the quality of education.

The internationalization of higher education is dominated by the goal of creating spheres of influence and making a profit. Even Altbach and Knight (2007, p. 293) argued making money to be the primary motivation for universities to prioritize the internationalization project. When considering the position and recognition of universities in international academia, especially in countries such as the USA, the UK, and Canada, these universities naturally pursue a profit-oriented internationalization strategy. In regions where a state-sponsored internationalization strategy is carried out, however, universities are observed to provide significant support to international students and even create the profile of a self-giving institution rather than a receiving/requesting institution. Altbach and Knight's categorization of internationalization types is meaningful in this context. According to them, four different types of internationalization exist traditional internationalization, European-style internationalization, developing country internationalization, and individual internationalization (Altbach & Knight, 2007, pp. 293–294). The US universities fall into this category of traditional internationalization. Campus-based universities offer international students a new way of education and lifestyle and aim to introduce them to different cultures. On the other hand, the internationalization strategy of developing countries is more concerned with providing the visiting students with the culture and language of the host country and building a bridge or new sphere of influence.

Gulf Countries' Vision for Internationalization in Higher Education

The advantages of internationalization in higher education regarding global politics and political economy are well known. Accordingly, Gulf countries in recent years have been developing a new vision to increase their effectiveness in international relations. In particular, Saudi Arabia, the UAE, and Qatar's steps toward internationalization in higher education have been remarkable. Among the Gulf monarchies, Saudi Arabia is the most prominent country in the region, having a unique internationalization vision and taking advantage of its status as a religious center. Meanwhile, the UAE and Qatar are trying to become alternatives for international students through the Western university campuses being opened, alongside the scholarships and opportunities they provide, and through implementing an aggressive internationalization strategy. Kuwait, Bahrain, and Oman have a slower and more limited internationalization vision than the others (Table 1).

The table illustrates the total inbound internationally mobile student figures for Gulf Cooperation Council (GCC) countries from 2014 to 2022. The trend reflects a general increase in international student mobility across the region, with notable growth in Qatar and the UAE. Bahrain has maintained a relatively stable count, while Saudi Arabia exhibited substantial growth until 2019, followed by a decline in 2020 and

Table 1 Total inbound internationally mobile students in GCC countries

Year	*Bahrain*	*Oman*	*Qatar*	*Saudi Arabia*	*United Arab Emirates*
2014	5039	3108	10,078	71,773	64,119
2015	5397	3571	10,509	73,077	73,445
2016	5128	3878	10,788	79,854	77,463
2017	5616	3044	11,034	78,344	-
2018	6040	3263	11,515	73,977	-
2019	6678	3384	12,332	73,216	225,339
2020	6192	3493	13,712	69,005	215,975
2021	5976	3502	15,392	63,417	-
2022	5720	-	17,017	64,874	-

Source UNESCO Institute for Statistics. Retrieved January 15, 2024, from http://data.uis.unesco.org. Data for Kuwait are not available

2021, possibly influenced by the global COVID-19 pandemic. Missing data points, especially for Kuwait, UAE, and Oman, limit the comprehensiveness of the analysis. The variations in student numbers among GCC nations highlight regional disparities, suggesting the importance of examining such factors as government policies and economic conditions for a more nuanced understanding of these trends. The number of international students tends to be higher in Saudi Arabia and the UAE, which have significant immigrant populations, due to immigrants' relatives often contributing to an increase in these numbers. These countries, particularly Saudi Arabia and the UAE, are known for offering employment opportunities and economic growth and for attracting immigrants seeking a better life. Consequently, a sizable immigrant community contributes to a higher international student count, thus reflecting the diverse educational landscape in these nations.

While internationalization is a general trend in the Arab world, the Gulf countries are the region's most politically, socially, and economically stable. The internationalization trend offers opportunities to be internationally recognized and integrated into the system and to closely follow global education systems and trends (Al-Agtash & Khadra, 2019, p. 69). As a result, a significant increase has occurred in the internationalization motivation of Gulf countries. In this framework, the internationalization visions of the Gulf countries in higher education should be considered individually and evaluated in this context.

Different strategies are applied in the Gulf countries in the context of the internationalization of higher education. For example, Saudi Arabia stands out in terms of student mobility due to its population advantage compared to other countries. While a large number of Saudi Arabian students study abroad, students from abroad similarly come to Saudi Arabia for education due to Saudi Arabia's status as a religious center. Qatar and the UAE are accelerating their internationalization processes on the grounds of institutional mobility by allowing campuses of internationally recognized Western universities to open in their countries. Kuwait and Oman follow a partnership-based internationalization strategy in higher education by developing programs affiliated with universities abroad. On the other hand, Bahrain adopts an internationalization strategy within the scope of the twinning model based on the preference of having students complete part of their education in Bahrain and the rest of their education in the country where the contracted university is located (Vardhan, 2015, pp. 7–8).

Saudi Arabia

As the most significant power in the Gulf, Saudi Arabia is highly influential in global and regional politics. At the same time, the fact that two important centers of Islam are located in Saudi Arabia gives the country privileges in many respects. Due to its rich oil and gas reserves, strong economy, and status as a religious center, the Saudi government pays special attention to higher education. In fact, students from across the Muslim world for decades have been studying Islamic sciences in Saudi Arabia. In this context, religious education is an issue that needs to be addressed in the context of the early internationalization strategy of Saudi higher education. However, with the Saudi government's new vision in global politics in recent years, it has pursued a very active strategy regarding higher education and has become even more prominent than other countries in the Gulf. In addition, Saudi Arabia's support for English language education at the high school level and the development of special programs for high schools in this context should be considered to have accelerated the internationalization of higher education (Le Ha & Barnawi, 2015).

Alamri argued that, although many managers in higher education institutions in Saudi Arabia are internationally educated, bureaucracy poses obstacles to internationalization. The centralization of the system by the Ministry of Higher Education and its directive to all universities to act according to the policies set by the Ministry of Higher Education has created many problems in realizing the steps of internationalization (Alamri, 2011, p. 90). Despite the centralized and dominant character of the system, the country has made significant progress in internationalization in recent years. Indeed, the presence of only one Saudi Arabian university from the Arab world in the Most Internationalized Universities ranking published by Times Higher Education (THE) reflects the successful strategy the Saudi administration has pursued in this field. In THE ranking of the most internationalized universities for 2023, King Abdulaziz University in Saudi Arabia ranks 24th (THE, 2023). When considering that the same university ranked 44th in the 2022 list, the internationalization efforts of Saudi Arabia's administration and Ministry of Education can be said to have paid off.

The most important motivation for accelerating the internationalization strategy in Saudi Arabia has been the Saudi Vision 2030 announced and implemented by Crown Prince Mohammed bin Salam. Within the

framework of this vision, an agenda of activities has been set regarding a wide range of fields, from economy, urbanization, environment, and industrial investments, to culture, arts, and increased scientific research. The Saudi Vision 2030 mainly emphasizes improving human capital in Saudi Arabia. The Saudi Vision 2030's Human Capacity Development Program (HCDP) emphasizes the mission of educational institutions in particular. The HCDP's strategy is structured around three key pillars: strengthening the academic foundation, preparing for the future job market, and offering lifelong learning opportunities. Initiatives encompass expanding kindergartens, implementing career guidance, and providing upskilling and reskilling programs to enhance employability. The program also promotes entrepreneurship and innovation. By aligning educational outcomes with future labor market needs and localizing high-skilled jobs, HCDP aims to cultivate creative thinking and data analysis in the Saudi workforce, as well as technical, emotional, and social skills. The overarching vision aims to instill values such as moderation, tolerance, determination, perseverance, discipline, and mastery to foster a robust work culture, thereby elevating Saudi Arabia's human capabilities and global competitiveness. The nation's ambitious human development goals include increasing kindergarten enrollment to 90% and positioning two Saudi universities among the world's top 100 by 2030 (Saudi Vision 2030, 2023a, b).

The Saudi Ministry of Education is also seriously trying to internationalize higher education through international agreements and collaborations. The Ministry of Education's approach to international agreements reflects a vision centered on a higher quality university education and high output on its website. This document states the Ministry of Education to be actively improving the education system by learning from global experiences and fostering collaboration between Saudi and international universities. This initiative aims to stay informed about global developments and to enhance academic, educational, and research capabilities through program and expertise exchanges, joint projects, and student programs. The ministry also organizes international exhibitions and conferences to address challenges, adopt educational technologies, and establish solid foundations for science and technology in education. This commitment is reflected in its implementation of joint academic and scientific programs that align with common goals and that address technology regarding educational needs (Saudi Arabia Ministry of Education, 2021).

As part of the Saudi Vision 2030, the Saudi government has set out to establish "a vibrant society, a thriving economy, [and] an ambitious nation" (Saudi Vision 2030, 2023a, b) and is trying to build a new country with this motto. Therefore, the internationalization of higher education is of primary importance for realizing this vision. The Saudi leadership meticulously implements the internationalization strategy regarding Saudi Arabia's ability to create alternative spheres of influence other than energy in the globalized world and to diversify the tools it uses regarding interest maximization by developing its human capital. With the Saudi Vision 2030, Saudi Arabia as the largest country in the Gulf aims to take part in the global system more assertively and ambitiously, and its internationalization steps in higher education stand out compared to other countries, which is in line with the country's vision for international relations and international economy in the coming years.

The UAE and Qatar

After Saudi Arabia, the UAE, and Qatar are the most active countries regarding the internationalization of higher education in the Gulf region. Saudi Arabia's religiously privileged position and population advantage provide different opportunities for internationalization compared to the UAE and Qatar. However, the UAE and Qatar, the two rising powers of the Gulf in global politics and economics over the last two decades, have been developing policies in the context of a strategy for becoming an educational hub in internationalization. In this context, Education City in Doha, Knowledge Village in Dubai, and Masdar City in Abu Dhabi are essential indicators of Qatar and the UAE's strategies of becoming educational hubs with campuses opened by international universities in the region. In this way, both countries are positioning themselves as centers of education, training, research, and innovation (World Bank, 2020, p. 18).

The role played the social and economic structures of the UAE and Qatar play in their different internationalization strategies compared to other countries should not be overlooked. The high level of prosperity and the multinational structure of both countries in terms of population make them especially preferred as places for international universities to open campuses. This also makes both countries particularly prominent regarding the mobility of international students (World Bank, 2020, p. 82).

Based on the UAE's 2010 Strategic Vision Plan for Internationalization in Higher Education, the UAE government aimed to increase the capacity and quality of higher education by investing $1.3 billion USD by 2018, thereby enhancing research and collaboration among universities (Mahani & Molki, 2011, p. 5). True to this vision, the UAE government has taken steps in the following years to turn the UAE into an educational hub where many Western universities have opened campuses.

Similar to the UAE, Qatar is also becoming an essential base in the region through the steps it has taken in higher education within the framework of its vision over the past years. The scholarships the State of Qatar provides, in particular, as well as the opportunities provided to students by various institutions in Qatar (Qatar Ministry of Education & Higher Education, 2024), have played an essential role regarding international students' preference for Qatar. In this context, Qatar has noteworthily attempted to attract students by paying from its budget rather than using commercial expectations and gains regarding Qatar's vision for internationalizing higher education. The State of Qatar, which tries to guarantee student mobility in these ways, actively uses public and private universities in its territory as an element of soft power and has thus created a crucial competitive environment for educating qualified students.

Kuwait, Oman, and Bahrain

The other Gulf states of Kuwait, Oman, and Bahrain have pursued a less aggressive internationalization strategy compared to Saudi Arabia, the UAE, and Qatar due to their position in regional politics and internal dynamics. With their declared visions to play a more active role in human and social development, these three countries have first sought to improve the quality of education in their own territories. In this respect, Bahrain, Kuwait, and Oman have tended to increase the level of education prior to internationalizing.

Bahrain aims to increase the quality and capacity of education within the framework of its Vision 2030 and to rank first in the Arab world regarding education quality (Bahrain Ministry of Education, 2024). Its Vision 2030 is built on three pillars: economy, governance, and society. Under the society theme, the focus is on developing a world-class education system to support and develop talented young people regarding

their education and to improve performance and standards in educational institutions and universities. In addition, Bahrain has focused on teacher training, on creating new industries with quality education and advanced skills, on evaluating education for high quality and performance, and on improving the research process and programs at universities to develop a knowledge-based economy, in addition to efforts at improving employment (Mosly, 2022).

Increasing the educational capacity and training competent people for the required workforce are among the priorities in Kuwait. Still, the lack of diversity in the fields of study in higher institutions in the country is a relative obstacle to the development of higher education (Al-Shammari, 2022, p. 44). Strategies for economic diversification, social progress, and sustainable growth drive Kuwait's Vision 2035. Through the Kuwait Schools Development Program (KSDP), nine school projects have been implemented in the vicinity of Kuwait City with a capacity of 4350 students. Kuwait also aims to add more than 13 institutions, including schools, colleges, and universities, as well as add more than 40,000 students (Kuwait Vision 2035: New Kuwait, 2017; Mosly, 2022). Moreover, even if Kuwait has a vision to internationalize higher education through government scholarships and some foreign university campuses, it has been slower than Saudi Arabia, UAE, and Qatar in this regard, given its economic power.

Oman's Ministry of Higher Education has also stated its primary goal to be improving the quality of education, achieving international standards, and building a more efficient higher education system within this framework (Oman Ministry of Higher Education, 2024). In its 2040 vision, Oman has included issues such as using national and international standards to develop its education ecosystem, establishing an independent and integrated higher education management and curriculum, and gaining a quality education system based on social collaborations in education, training, national capabilities, and scientific research. Oman also aims to be among the top 10 best-performing education countries by 2040 (Mosly, 2022; Oman Vision 2040 Implementation Follow-up Unit, 2023).

Conclusion

Developments in global politics and structural transformations in international political economy have accelerated the internationalization trends in higher education, and new motivations have led countries to determine specific strategies in this field. Internationalization in higher education has enabled states to increase their sphere of influence in the international arena and begun to occupy more space in the basic strategies of states compared to previous decades. In particular, assertive actors who want to strengthen their position in global politics are paying more attention to this field and consider higher education an important soft power factor.

In recent years, Gulf countries have also been diversifying their policies to gain a more influential position in international relations. In this context, a serious trend is seen to be present in the Gulf regarding the internationalization of higher education, with serious investments having been made in this field. Saudi Arabia, the UAE, and Qatar stand out with regard to the steps they are taking. In the Gulf countries' higher education strategies, providing opportunities to international students to create a sphere of influence has been more predominant than pursuing commercial profit. While Saudi Arabia with its advantage of being a religious center has approached internationalization in higher education with a religious mission motivation, the UAE and Qatar have aimed to gain an international reputation by becoming educational hubs in the region. As relatively secondary powers in the area, Kuwait, Bahrain, and Oman are pursuing a calmer and more future-oriented higher education strategy than the previous other three countries.

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Internationalization and Sustainability of Higher Education Through Education Quality Assurance Mechanisms in Georgia

Ekaterine Pipia, Lasha Margishvili, and Nikoloz Parjanadze

Introduction

Georgia is a post-soviet country that has undergone significant educational changes since gaining its independence from the Soviet Union in 1991 (Ginsberg, 2002). One of the first major developments concerns the privatization of Higher Education Institutions (HEIs), as supported by the Decree of the Supreme Council of the Republic of Georgia issued in 1991. The fast-growing tendency of establishing private HEIs paused soon, as many of these institutions struggled to survive and compete in the given market. Consequently, the 200 private HEIs that had been granted licenses in the 1991–1992 school year had decreased to 93 a year later. In the 2004–2005 school year, more private HEIs were established,

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making for a total of 172 institutions (Chakhaia & Bregvadze, 2018a). The universities were entitled to design their tailored curricula and general education processes without being controlled or monitored by external legislative bodies. No regulatory procedures in terms of authorization or accreditation were applied to these newly established institutions until reaching the most important milestone in the Georgian higher education system when it joined the Bologna Process in 2005.

According to Sharvashidze (2005), a great portion of the budgets of private HEIs was supported by tuition fees, though other private sources of funding were somewhat available. The tuition fees were decided by the universities. The admission procedures had been inherited from the Soviet education system, as the university entrance exams were centrally administered, and quite a few cases of corrupt practices by some university administrations had occurred. Relatively few applicants with exceptionally high academic performance were able to enroll in the prestigious universities (Lorentzen, 2000).

Until the late 1990s, the university programs were designed for five years, granting the graduates a specialist diploma in a particular field upon completion of the program. With the new reform initiatives later on in the 2000s, these degrees were recognized as equivalent to a Master's degree. In 1996, the Anglo-Saxon Education model was introduced (Lorentzen, 2000). The model was based on a two-tier education system: a four-year bachelor cycle and a two-year master's cycle. As a member of the Bologna system in 2005, Georgia restructured its education system into three cycles (BA, MA, and PhD) and implemented the European Credit Transfer and Accumulation System (ECTS) and quality assurance mechanisms to ensure the education system's compatibility at the international level.

Since 2005, new educational reforms have been implemented in terms of admissions, funding, and quality control systems at HEIs and at the state level. The National Center for Assessment and Examination (NAEC) was established to provide unified examinations and ensure transparent assessment of the university applicants' relevant knowledge. The reform first started with BA-level programs and was later employed for MA programs as well. The establishment of the NAEC eliminated corruption practices at the university level (Chankseliani, 2013b). New regulations and admission procedures provoked a change in the funding system as well. Direct budgetary allocations to the universities were changed to a voucher system. Performance on the national examinations and in one's

field of study became the indicators for receiving fee vouchers for the students at the maximum amount in public universities, which in 2005 was 1500 Georgian Lari (GEL) and increased to 2250 GEL in 2010. This funding policy is used with all study programs offered by the HEIs in Georgia. Grants of 50%, 70%, and 100% are available to students. The size of the grants and the priority fields are defined and approved by the Government of Georgia (Parliament of Georgia, 2005).

In 2004, the new Law of Georgia on Higher Education and the practice of institutional accreditation of Georgian HEIs initiated by the National Education Accreditation Center shaped a way to the Bologna Process in 2005. The establishment of the external quality monitoring agency and the process of institutional accreditation of the Georgian HEIs resulted in a decreased number of institutions (from 196 to 42; Sharvashidze, 2005). In 2010, Georgian HEIs were obliged to obtain authorization as an institution and have their programs accredited individually. According to the Law of Georgia on Higher Education (Parliament of Georgia, 2005), three types of HEIs function in Georgia: universities, teaching universities, and colleges. "Such classification presents a remarkable break from the Soviet tradition, which considered HEIs primarily as places for teaching, while most research was conducted at the Academy of Sciences" (Chakhaia & Bregvadze, 2018a, 2018b, p. 191). The tendency to integrate European values in education is reflected in new educational reforms having strong ties with global standards. The Georgian government and academia are well aware of current trends in higher education, as by joining the Bologna process in 2005 Georgia's system of higher education started to closely follow the developments in European Higher Education Area (EHEA). The system also followed developments in the global context, so that Georgian HEIs' education and qualifications issues became compatible with and recognized by education official bodies worldwide. Accordingly, the concept of education quality assurance is proactively approached in the Georgian higher education context to support system development. External and internal quality assurance mechanisms are allotted much attention in higher education management and administration; however, quality culture remains a relatively new concept in the context of Georgian education, and though mechanisms are implemented, more proactive approaches and intense endeavors need to be employed to mold education management processes and, most importantly, teaching, learning, and research to the requirements of quality assurance.

The Current Status of Georgia's Higher Education System

Gaining insight into the system of higher education in Georgia will be essential before discussing the reform initiatives that have occurred in Georgia since 1991 when it claimed its independence from the Soviet Union. Similar to most European states, the Georgian context of higher education distinguishes among three types of HEIs: universities, teaching universities, and colleges (Parliament of Georgia, 2005). According to the legal definitions, universities are actually higher educational institutions that offer education at all tertiary levels (i.e., BA, MA, and PhD) and are intensely engaged in scientific research. Teaching universities are not granted permission to offer doctoral programs and are required to deliver educational programs at the master's level. Though the law does not strictly define the nature of research teaching universities should be engaged in, to have teaching universities pay due attention to applied research along with teaching and learning is logical. As for colleges, the law defines that they are to deliver programs at only the first level of tertiary education (i.e., BA programs). Currently, Georgia has 62 higher educational institutions, of which some are private and some are state (National Center for Educational Quality Enhancement [NCEQE], 2023). As of the 2022–2023 academic year, the total number of students at Georgian HEIs is 161,060 with 97,768 at state institutions (universities, teaching universities, and colleges) and 63,292 at private universities and teaching universities (National Statistics Office of Georgia, 2023). Private and state universities as of 2022 had a total of 3638 doctoral students (ibid.).

Awareness of the status quo of education funding in Georgia is also essential for a proper understanding of Georgia's higher education system. The country is not rich but has been steadily developing economically, which is reflected in its GDP per capita of $6671.9 USD as of 2022 (National Statistics Office of Georgia, 2022), compared to 1991 when the GDP per capita was $1314.70 USD (The World Bank, 2021). Education funding has increased throughout the decade, with 2 billion Georgian Lari having been allotted from the central budget for 2023, roughly amounting to 4% of the GDP per capita (Ministry of Finannce of Georgia, 2023). However, this is still less than what the Georgian government (Machavariani, 2019) had declared, which was to achieve

educational funding of 6% of the per capita GDP (> 3 billion Georgian Lari) by 2022. Increasing state funding on education is of crucial importance because, as Agasisti and Bertoletti (2020) claimed, research shows that this has a positive impact on the quality of education, with education itself having positive effects on employment, economic growth, and development. Accordingly, having the Georgian state reach a European average percentage of GDP allocated to education is essential. Even though the tendency has been to increase education funding in recent years, especially in developing states, the percentage of funding in terms of percentage of GDP has been much lower in developing states than in developed ones. Accordingly, if education is defined as a state priority, at least an average benchmark should be attained, which is 4.89% of GDP in Europe according to 2020 data (Nuţă et al., 2023), for example. Among European Union states, Romania, Bulgaria, the Czech Republic, and Slovakia are below the European average. Other European states whose education systems are striving more or facing more challenges allot more funds to education in terms of the percentage of GDP (e.g., Estonia, Hungary, Latvia, Slovenia; ibid.). These data vividly show the need for education funding to be increased in Georgia in order to attain the European average. In addition, education system rehabilitation goals also call for this measure. In line with the argument presented above regarding higher education funding positively correlating to employment and economic growth, scholars' statement that the higher education fundings' percentage of GDP should be increased (Jibladze & Glonti, 2020) highlights the importance of the state intensifying its education funding policy.

An Overview of the Quality Assurance Reforms in Georgia's Higher Education System

Scholars in Georgia argue that the history of the development of the higher education system can be classified into Soviet, post-Soviet, and modernization phases (Amashukeli et al., 2020). However, having the Georgian system of formal education be considered in line with all historic peculiarities is essential. Accordingly, pre-Soviet stage should also be identified. Some scholars argue that the first reform initiatives and the advent of efficiently organized education processes in a formal context in Georgia date back to the eleventh and twelfth centuries when scholarly work and teaching and learning were intense at places such as the

Gelati Academy at Gelati Monastery in Western Georgia (Gurchiani, 2017). As a result of historic hardships, however, the formal system of education saw gaps throughout the centuries due to constant invasions and wars. Accordingly, during the short-lived independence from the Russian empire at the beginning of the twentieth century, Georgian scholars restored centuries of tradition regarding formal education by establishing the university in the capital city of Georgia in 1918 (Ivane Javakhishvili Tbilisi State University, 2022). This actually started the Georgian system of higher education in line with the classic vision of a university and, as Glonti and Chitashvili (2007) stated, was the first university not only in Georgia but also in the Caucasus. However, the Soviet occupation that occurred soon after shaped the higher education system differently in Georgia as a centrally organized process managed from Moscow; this impeded the development of considering national interests. "Like many nations, which were incorporated into the Soviet Union in the twentieth century…, Georgia was considered simply a region of the USSR" (Ginsberg, 2002, p. 472). Accordingly, the nature of higher education provision in Georgia was very similar to how it occurred in other Soviet republics. As Chankseliani (2013a, 2013b) explains, even though the Georgian HEIs were quite limited, they still retained a certain independence in terms of student enrollment; the major issues of education planning and administration were strictly controlled by the central Soviet government. Nevertheless, a centrally planned education system in line with the Soviet-planned economy still offered relatively consistent development regarding higher education (Amashukeli et al., 2020).

The shaping of Georgia's current education system, including the higher education system, started after the fall of the Soviet Union (Janashia, 2018). Accordingly, discussing the waves of higher education reforms since 1991 when Georgia claimed its independence from the Soviet Union is essential for understanding the nature and the specificity of the higher education system. The post-Soviet phase brought chaos to the system. Even though it kept momentum for some time, the context of education was not regulated properly (Amashukeli et al., 2020), as no specialists were found who could actually be in charge of education planning and administration. This was caused by the fact that the central Soviet government had intentionally employed a central management system so that the republics would not be tempted to try to survive on their own and because centralization ensured tight control over the Soviet republics. Thus, post-Soviet, the unregulated system

offered much opportunity to so-called newly emerging "entrepreneurs" (the authors' emphasis) whose major impetus, as Chakhaia and Bregvadze (2018a, 2018b) argued, was to safeguard their personal profit by establishing numerous private higher educational institutions. They were more like diploma mills rather than institutions that offered a quality education or relevant qualification (Glonti & Chitashvili, 2007). The lack of regulations, policies, and vision for development and system management was devastating for the whole educational context. Even worse, it also resulted in corruption (Amashukeli et al., 2020) and nepotism (Chitashvili, 2020), which definitely were additional factors curbing the system's rehabilitation.

The beginning of the 2000s brought drastic changes to the Georgian system of higher education. As Chitashvili (2020) identified, the rationale for the changes was to fight corruption and build accountable systems to transform a former Soviet republic into a European state. Mixed feelings were felt among scholars and educators in Georgia about the reforms that had been initiated. However, the system called for rehabilitation to support the development of the country, as well as to ensure that the declared European integration was achieved by modernizing the public and private sectors. Education supports societal development not only by equipping individuals with knowledge, expertise, and relevant qualifications, but also by raising individuals' awareness of citizenship so that they become responsible members of society and participate in decision-making, as Margishvili (2021) stated.

Rehabilitation of Georgia's higher education system was envisaged through more intense integration into the European context, and the process started with the adoption in 2005 of the New Law on Higher Education (Parliament of Georgia, 2005). Practical steps to start the Europeanization of the higher education system (Jibladze & Glonti, 2020) occurred by becoming the member state of the Bologna Process in 2005 at the Bergen Summit and by joining the European Higher Education Area (Ministry of Education and Science of Georgia, n.d.). Joining the Bologna Process substantiated changes in the system in many directions, such as by introducing the three-level degree system (BA, MA, and PhD), the National Qualifications Framework, and the European Credit Transfer System; giving students and faculty the opportunity to participate in international mobility; and providing internal and external accountability through quality assurance system. These trends in the context of

higher education meant that the state put more emphasis on the necessity to understand and respond to global perspectives by rehabilitating the higher education system. This in turn should offer more prospects for the development of the state itself in many directions, whether social, economic, cultural, or political.

Rehabilitation of the Georgian higher education system was initiated through the educational quality assurance agenda. Margishvili (2021) stated that developments in the quality assurance of higher education should be described in terms of three phases: (1) 2005–2010; (2) 2010–2015, and (3) 2015–2018. Discussing all these phases in the context Amashukeli et al. (2020) referred to as the modernization of higher education would be logical. However, modernization could also be used to describe the post-2018 period with regard to Georgian higher education quality assurance (QA). Accordingly, to differentiate between the two phenomena, the term "modernization of QA in higher education" can be introduced alongside the term "modernization of higher education." Thus, the post-2018 period is a modernization era of external and internal QA mechanisms. As such, a fourth modernization phase can be added to the Georgia higher education QA development cycle.

The first phase of QA (i.e., 2005–2010) has already been mentioned to have been marked by the development of the New Law on Higher Education and joining the Bologna Process in 2005. The strong message to the system was that new standards and requirements were to be introduced into the system to make it compatible with and competitive in an international educational context, with the aim being to produce competitive graduates for the local and international labor markets (Chokheli & Alpenadze, 2015) and to support research, innovation, and coherent development. A QA system was introduced in Georgia by establishing the National Center for Education Accreditation (NCEA) in 2006 by order of the Minister of Education and Science of Georgia. This was later transformed into Georgia's National Center for Educational Quality Enhancement (NCEQE; Parliament of Georgia, 2010b), a legal entity of public law under the aegis of the Ministry of Education and Science of Georgia that enjoyed extended organizational, operational, and financial autonomy from the Ministry. The aim of the NCEA was to grant authorization (i.e., institutional accreditation) to higher educational institutions and permission to offer educational services in the territory of Georgia. "The establishment of the NCEA can be assumed as one of the first attempts to transpose the European norms of QA into the Georgian

HE system" (Amashukeli et al., 2020, p. 77). However, much skepticism was present toward the new QA system, because institutional evaluation was more concentrated on quantitative rather than qualitative assessment indicators and did not fully reflect educational values in the evaluation process. Amashukeli et al. also stated that the new system had received much criticism because of its formality, and the reduction of the number of HEIs was perceived by various parties as its major function. The reduced number of HEIs shortly after the introduction of the QA system might serve as evidence for this argument. However, the decrease in the number of HEIs was determined not by the fact that severance mechanisms were employed, but rather through the objective evaluation of the teaching and learning resources and facilities. This is what showed that the majority of HEIs were unable to meet the minimum requirements as determined by the institutional accreditation standards.

The second phase of the Georgian QA system (i.e., 2010–2015) saw structural changes in Georgia's higher education system in line with the European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) 2005. Reorganizing the NCEA into the NCEQE was a structural part of the reform initiative in 2010 and was followed by more emphasis through two external QA mechanisms. Not just formal procedures, but also teaching and learning would constitute institutional authorization and educational program accreditation. These changes in the QA system were essential, as requirements outlined in the ESG 2005 would mean "…the shift to student-centered learning and the need for flexible learning paths and the recognition of competencies gained outside formal education" (EQUIP, 2016, p. 11). A greater focus on teaching and learning was of pivotal importance for the system rehabilitation and for directing Georgia to introduce the tendencies of a knowledge-based society. To ensure that QA mechanisms were in line with the current trends in education, a new Law on Education Quality Enhancement was introduced in 2010 (Parliament of Georgia, 2010a), which provided a legislative basis for system-wide transformation, the strengthening of QA culture, and implementing of external and internal QA mechanisms at institutional and educational program levels. One important initiative in the second phase of the QA reforms in Georgia was becoming an ENQA affiliate in 2013 (National Center for Educational Quality Enhancement, 2018). The ENQA affiliation was an important step forward for strengthening the internationalization aspect of Georgia's higher education system and entering the European Higher Education

Area, which would mean more internationalization of higher education, greater student and staff mobility, and improved quality of education. The second phase of reforms ensured the institutionalization of the external and internal quality assurance mechanisms that both the state and private universities had implemented (Amashukeli et al., 2020).

The third phase of QA reform initiative in 2015–2018 was even more intense which was defined by the fact that external QA mechanisms needed more refinement to be harmonized with ESG standards and guidelines. Besides, still there was a feeling among stakeholders that external QA could be used as punitive measures (Amashukeli et al., 2020). Accordingly, in order to be better harmonized with the revised ESG 2015, new QA practices in many directions were introduced in the system: (a) along with the emphasis on teaching and learning, assessment of research and innovation had to be intensified; (b) internationalization of higher education was to be supported more in order to provide students with better opportunities for employment and career development; (c) more transparency and trust in higher education—the aspects of higher education which were even more intensified in ESG 2015 (EQUIP, 2016). Accordingly, starting with the year 2015, intense changes were introduced in the Georgia QA system to be better compliant with ESG requirements and commitments and responsibilities assumed through the Bologna process and EU-Georgian Association Agreement (Margishvili, 2021). The NCEQE revised QA standards and procedures to provide a better framework for assessment and to ensure objectivity and transparency. Student-centeredness was even more promoted through the vision of quality enhancement and improvement, and new QA approaches were aimed at strengthening the development-oriented and outcome-based function of the QA system (NCEQE, 2018). The majority of HEIs went through an external evaluation in 2018 in accordance with the revised QA standards and procedures, so that through a learner-centered philosophy, a healthy and fit system could provide the right context for receiving a quality education.

The fourth phase of QA, which was referred to as the modernization of QA in higher education, put even more emphasis on the development of external and internal QA mechanisms in the context of Georgian higher education. This will be reflected in more detail in the following section.

Recent Developments in Georgia's External and Internal Quality Assurance Mechanisms

During the fourth phase of QA, the most recent developments regarding QA in higher education in Georgia are interesting in terms of the extended internationalization agenda the NCEQE followed. In order to gain broader recognition, extend the geography of Georgia's higher education system, ensure the recognition of academic degrees bestowed by higher educational institutions in Georgia, support student and faculty mobility accordingly, and encourage the exchange of knowledge and expertise, the NCEQE went through an external QA evaluation and gained European Association for Quality Assurance in Higher Education (ENQA) membership in 2019. Recognition by ENQA involved the recognition of Georgia's entire higher education system in terms of initiating and implementing the relevant policies and practices in order to harmonize Georgia's higher education system with ESG standards and requirements, as well as with the tendencies in the European Higher Education Area in general (Makharashvili, 2023). ENQA membership has made Georgia an educational point of attraction for many international students. However, this has put more pressure on HEIs to improve the quality of their educational programs in line with the best trends and practices in teaching and learning and QA. The NCEQA is registered with the European Quality Assurance Register for Higher Education (EQAR), which offers Georgia's HEIs an excellent opportunity to disseminate information about the educational programs offered throughout Georgia (National Center for Educational Quality Enhancement, 2023). One more mechanism supporting the internationalization agenda involves NCEQE being recognized by the World Federation of Medical Education (WFME) in 2018 (National Center for Educational Quality Enhancement, 2018), through which medical doctor programs have become attractive to international students and staff. When considering all these initiatives, one can argue that "… within the entire modernization phase, Georgia was trying to adjust the national higher education system to the European model" (Amashukeli et al., 2020, p. 78). Some of the major mechanisms supporting the education system's rehabilitation have been determined as the close cooperation with European partners and sharing their experience in education provision, as well as having QA for higher education.

Throughout the QA modernization phase, the most recent and system-wide change reform initiative has been the introduction of the system of cluster accreditation of educational programs. This system aims to strengthen external and internal QA mechanisms while also helping HEIs raise their quality of teaching, learning, research, and innovation. The change initiative was prepared and developed throughout 2022, with its implementation beginning at the end of 2022. Accordingly, the model of cluster accreditation has only recently been put into practice, and thus an evaluation would not be thorough or substantiated. This is why talking about the aims and expected outcomes of the reform initiative would be wise. "The necessity of introduction of the cluster accreditation system of educational programmes of higher educational Institutions was prompted by the analysis of the areas for improvement identified in the accreditation process and the international practice of programme accreditation" (National Center for Educational Quality Enhancement, 2022). In accordance with the outcomes of the analysis and along with the amendments to the national legislation regulating the field of higher education, certain changes were introduced in educational program accreditation standards. Within the scope of these changes, putting more emphasis on learner-centeredness, doctoral education, enhancing research capacity, entrepreneurship, research, and innovation was determined to be essential. As external mechanisms, accreditation standards follow modern trends in didactics (i.e., constructivist approach in teaching and learning) so that active learning occurs. Having research be integrated in teaching and learning is of pivotal importance. Accordingly, student supervision and developing research skills relevant to educational levels are reflected in an external QA. These changes were initiated to support a broader reform initiative: the cluster accreditation of educational programs.

The cluster accreditation model enables higher educational institutions for refining educational programs and internal QA mechanisms in order to ensure continuous development and the improvement of QA procedures. The rationale for cluster accreditation is to enable HEIs to better reflect their capacity to carry out educational programs. Through internal QA, HEIs are supposed to provide an in-depth analysis of their teaching and learning resources, facilities, academic and administrative staff, research capacity, and expertise to support research and innovation. New accreditation standards put emphasis on the first mission of a university being teaching and learning, the second mission being research, and the third mission being the social dimension of academia: Universities need to

assume social responsibility and contribute to societal development and the creation of public good. The HEIs have not duly addressed these issues, and in the case of realizing a university's third mission in particular, HEIs need to gain more knowledge and expertise. Accordingly, both internal and external QA mechanisms are supposed to contribute to the development of quality culture, thus defining the context for institutional growth and development.

Concluding Remarks

Georgia's higher education system has a complex history of development. The system of formal education started centuries ago, but due to historic misfortunes, disruptions had occurred in its development. During the short-lived independence at the beginning of the twentieth century, the first Georgian university was established, and a consistent system development was envisaged. However, the Soviet occupation disrupted the planned development and brought the system to a uniform vision of education policy that was employed in all Soviet republics; this actually ended the unique development of Georgia's national system of education. Though the Soviet occupation in the twentieth century brought a certain stability to the education system, it suppressed Georgia's national interests and statehood. Claiming independence in 1991 marked a new era in the development of the Georgian state and its systems, including education. Still, the first decade of independence mostly saw stagnation, and no consistent policy initiatives were introduced. Drastic changes were initiated at the beginning of the twenty-first century, and joining the Bologna Process served as a trigger for higher education system development. European integration was determined as a state vision for development, and through policy borrowing and lending, many European and Western trends entered the Georgian higher education area. Still, national policies unique for the local context were also developed. Centralization of certain domains (e.g., university entrance procedures through centrally organized national exams) and decentralization of decision-making (e.g., granting autonomy to universities) determined the nature of the major reform initiatives in Georgia's higher education system. Introducing quality assurance mechanisms and developing standards for institutional and educational program evaluations served the purpose of harmonizing Georgia's higher education system with the European Higher Education Area. External and internal QA mechanisms are supposed to help

universities better realize their capacity for teaching, learning, research, and development through in-depth analysis of teaching and learning resources, facilities, academic and administrative staff, research capacity, and expertise to support research and innovation. In spite of the positive trends in the development of Georgia's higher education system, burning issues are found needing to be resolved in order to raise the quality of teaching, learning, and research. These issues have not been duly addressed by HEIs. With regard to universities realizing their third mission, in particular, HEIs need to gain more knowledge and expertise. Accordingly, both internal and external QA mechanisms are supposed to contribute to the development of quality culture, thus defining the context for institutional growth and development.

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Global Agendas in Higher Education and Current Educational Reforms in Albania

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Introduction

Albania has undergone various reforms in higher education as a way to integrate all its higher education institutions (HEI) into a new global trend. Nowadays, the globalization of higher education (HE) is not only a goal to be achieved but also a necessity due to the extraordinary development of technology. The aim of this paper is to present the steps and reforms that have been undertaken in Albania to integrate with the global agenda for HE.

However, the development and improvement of education services in Albania have even played a fundamental role in the process of integrating into the European Union (EU). With reference to the Thessaloniki Summit in June 2003, the EU evaluated Albania as a potential member state of the EU. In 2006, Albania signed the Stabilization and Association Agreement, which was entered into force in April 2009. This agreement replaced the previous agreement with the European Economic Community signed in May 1992 regarding trade and economic and commercial

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cooperation. This new political approach aimed to increase the stability and prepare Albania for integrating with the EU.

As a result, Albania became a candidate country in the European Union (EU) in June 2014, and since then, the process of integration of Albania has become a national priority in many fields, leading the way to the government agenda. Starting from here, Albania needed to fulfill the acquired criteria and standards of the EU as a precondition for passing the other steps in the process of opening negotiations with the EU. In this regard, Albania started to undertake reforms to adopt EU standards and fulfill the accepted criteria. Many laws and bylaws were amended and actions taken in this regard, even in the field of education.

The adoption process has not been easy for a country such as Albania that lacks political stability. The Ministry of Education and Sports in Albania and the EU Commission have continuously exchanged compatibility tables regarding the legal changes in the field of education. Many changes occurred in Albania's HE system, and these resulted in success with the EU opening negotiations with Albania in 2022. As far as the aims of education itself, however, many other actions need to be taken in order to adopt globalization standards and increase employability after graduation.

The changes in HE started in 2003 after Albania signed the Bologna Declaration, and today Albania has a modern and almost European HE system, starting with the organizing of the services offered. As such, the Constitution of Albania and its Law on Higher Education has HE be offered by public and non-public HEIs. The first group includes HEIs with direct public funding, while the second group includes two types of HEIs: non-profit and for-profit, neither of which receive public funding. All the above HEIs are managed and operated based on the Law on Higher Education and the rules for non-public enterprises and foundations in Albania. HEIs are organized into the following constituent organizational units: main units (i.e., faculties, research and development institutes, professional colleges, and subsidiaries), basic units (i.e., research and development departments and centers), and technical units (i.e., laboratories, didactic units, libraries, and other units that carry out scientific studies and services). HEIs are governed by collegial decision-making bodies such as the Academic Senate, the Administration Council, and the Faculty Council and by executive management authorities such as the rectors, deans, and department heads. Members of the Senate and the Faculty Council are elected by the entire staff (Commission for Higher

Education and Scientific Research [CHESR], 2014). All these units must collaborate to improve the quality of education in university studies, fulfill students' needs, and guarantee them a brighter future.

Curricula in Higher Education Institutions

Actions such as adopting a new and modern curriculum, improving and developing the system capacities, and improving the service for compulsory education were the focus of the process of Europeanization and were adopted according to the objectives of the European framework. The HE system was reorganized according to the principles of the Bologna Declaration in 2003 and moreover as a result of the globalization of higher education. The number of mobilities increased for students and professors, and universities started to expand their collaboration with foreign universities. Professors started to implement new teaching and learning methods based on their experience abroad. The global impact brought about the need to intervene with the curricula, so by 2014, the study schedules had been completely changed, with bachelor's and master's degree studies being introduced first (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017).

In 2007, Albania adopted a new law that would regulate the activity of HEIs. This law was soon amended in 2010 with a new law that specified and emphasized the mission of HEIs and the goals they had to reach. After 2007, the number of non-public HEIs increased in Albania, but not all of these institutions were licensed and accredited to provide this service. These non-public institutions enrolled students to study and pay fees, but they had several legal shortcomings, such as they had no registration number provided by Educational Service Center (ESC), the study programs these institutions offered were not accredited by the Agency for Quality Assurance in Higher Education (AQAHE), and the Ministry of Education and Sports (MoES) had not licensed the institutions to provide this service (CHESR, 2014).

The 2010 Law on Higher Education regulated different areas such as the organization of HEIs, universities, faculties, and departments; defined the governing bodies that had to be established as well as how they would function; and also defined the teaching staff recruitment procedures. The statutes of each HEI would cover their activities and organization in detail (Education, Audiovisual and Culture Executive Agency [EACEA], 2010).

Because this law was adopted after the signing of the Bologna Declaration, the reform process that followed addressed issues and called for several reforms, such as the consolidation of the three-cycle system of studies, the consolidation of HEIs' financial autonomy, improvement of the process for recognizing academic qualifications, the setup of performance standards and external and internal quality assessment, approval of a national qualification framework, student mobility within the country and abroad, and improved student HEI enrollment (EACEA, 2010).

Based on the 2010 Law on Higher Education, MES became the only legal basis for regulating HEIs' activities in 2014 after a detailed check of each HEI saw the licenses of several non-public HEIs get revoked due to operating outside of legal provisions. According to Laze (2011), only about 12 public HEIs and 34 non-public HEIs were found in 2011, with the non-public ones in this period being relatively new (the first having only opened six years prior).

According to AQAHE, Albania currently has 42 HEIs. Based on Articles 17–21 of the 2010 Law on Higher Education, Albania has the following HEIs: 12 public universities; 12 non-public universities, six academies, nine university colleges, and three high professional colleges. Albania has currently closed 26 HEIs.

Several bylaws, Decisions of the Council of Ministers (DCMs), and instructions have followed this law and its adoption. Considerable reforms have also been made in almost every aspect of HE. HE financing has been increased, and the Erasmus + program turned out to be very successful. This is why MoES is considering continuing to collaborate with the European Union and sign the new agreement. Horizon Europe was also signed in 2022 after the successful experience with Horizon 2020, which expanded collaboration in the field of research. Meanwhile, curricula have also been adopted to meet the standards of the Bologna Declaration, with DCM 41 dated January 24, 2018, titled "On the Elements of Study Programs Offered by Institutions of Higher Education," and amended in 2019 and 2021 providing the necessary criteria in accordance with the legal provisions, which changed considerably during these years.

According to DCM 41/2018 described above, the elements that make up the structure of study programs HEIs offer consist of training credits in higher education through the European Credit Transfer System (ECTS), the learning outcomes of the study program, the teaching

components of a study program, the categories of the learning components that characterize a study program, the maximum admission quotas and number of study groups.

Regarding knowledge checks and evaluation instruments, DCM 41/2018 calls for knowledge checks that serve to evaluate student progress and measure the acquisition of results on students' learning of a subject and study program. The assessment criterion describes what the student is expected to achieve and at what level, with the aim of demonstrating achievement of learning outcomes for a given subject. The evaluation methods are the techniques, tools, and instruments for gathering information about the results and determining the extent to which a student has acquired the expected results of learning a subject.

While related to learning outcomes, DCM 41/2018 calls for learning outcomes in a study program that will determine the formation, knowledge, skills, and competencies that benefit the student until the end of the study program. These are defined in general in the Albanian Framework of Qualifications, after which the HEI specifies and then develops these following the specifics of each study program. The outcomes are evaluated through procedures based on clear and transparent criteria and are divided into two categories: determinants, which are the same for all study programs with the same name and offered by various HEIs, and the specifics, which differentiate study programs with the same name but are offered by different HEIs. These learning outcomes are determined separately by each institution providing the study program.

The curriculum of each study program defines the subjects of the study program, divided according to the categories defined under Point 2.5 of DCM 41/2018 into years, semesters, and hours according to the educational components for each subject as defined in Point 2.4 of DCM 41/2018.

Elements of study programs are organized according to three cycles and three levels of the National Framework of Qualifications (NFQ). The components of the first cycle of the Bachelor program belonging to Level 6 of the NQF involve basic subjects (category A: methodological preparation and general culture which consist of 15–20% of the European Credit Transfer and Accumulation System [ETCS]), characteristic subjects (category B: preparations in a scientific discipline consisting of 50–55% of the ETCS), interdisciplinary/integrating subjects (category C: subdisciplines, profiles, and nonmandatory subjects consisting of 12–15% of the ETCS), supplementary subjects (category D: foreign languages,

informatics, professional practice consisting of 10–15% of the ETCS), and the final exam (category E consisting of 3–5% of the ETCS for the entire study program.

The components of the second cycle Master's program belong to the 7th level of the NQF and include basic subjects (category A: methodological preparation and general culture consisting this time of 5–10% of the ETCS for Professional Master and Scientific Master of Arts and 15–20% for Scientific Master integrated), characteristic subjects (category B: preparations in a scientific discipline consisting of 30–40% of the ETCS for a professional Master's, 50–60% for a scientific Master's or Master of the Arts, and 45–55% for an integrated scientific Master's), interdisciplinary/integrated subjects (category C: subdisciplines, profiles, and nonmandatory subjects consisting of 20–30% of the ETCS for a professional Master's, 12–20% for a scientific Master's or Master of the Arts, and 15–15% for an integrated scientific Master's), supplementary subjects (category D: foreign languages, informatics, and professional practice consisting of 10% of the ETCS for professional Master's, scientific Master's, or Master of the Arts and 6–8% for an integrated scientific Master's), and the final exam (category E consisting of 10–20% of the ETCS for a professional Master's, 10–15% for a scientific Master's or Master of the Arts, and 3–5% for an integrated scientific Master's).

The components of the third cycle executive Master's belonging to the 8th level of the NQF involve basic subjects (category A: methodological preparation and general culture consisting of 5–10% of the ETCS), characteristic subjects (category B: preparations in a scientific discipline consisting of 50–60% of the ETCS), interdisciplinary/integrated subjects (category C: subdisciplines, profiles, and nonmandatory subjects consisting of 12–15% of the ETCS), and a final exam (category E consisting of 18–20% of the ETCS).

According to DCM 41/2018, the total percentage of subjects in categories A and B must be at least 70% in the first cycle of the Bachelor programs and the integrated study programs of the second cycle of the Master of Science program, and at least 60% in the second cycle of the Master of Science programs. In the second cycle of the Master of Arts programs, this ratio is set according to the specifics of the study program itself. For the study programs of the third cycle of the executive Master's, the subjects in category B must have a marked practical character and orientation with the aim of furthering students' professional advancement. To meet this objective, courses can be offered in collaboration with

industry and the professional world; in any case, this must involve at least 50% practice. Moreover, a balanced ratio should be maintained between theoretical and practical training modules and activities (50/50) in professional programs. About 25% of the program must be dedicated to training in practical/concrete work in the profession (DCM 41/2018).

However, the elements of the syllabus have remained unchanged since the last amendment to the DCM in 2019. Annex No. 3 of DCM 879/2019 calls for the following elements: Subject Name, Head Lecturer/lecturer of the subject, number of credits, number of teaching hours, lecture and seminar, practice or laboratory hours, academic year and semester, type of subject (i.e., mandatory/elective), email address of the lecturer, ethical code, learning outcomes, key concepts, course outline for 15 teaching weeks, teaching–learning methods, attendance, assessment method and criteria, textbooks, and literature (whether mandatory/compulsory), and final remarks.

In addition to all the changes made due to the Europeanization and globalization of HE, many other initiatives still need to be taken in Albania. Albanian HEIs need to review all lesson plans and the whole approach in general to the learning process in order to implement the Bologna Process as required. Specific degrees require specific regulations and syllabi that need to be adopted according to foreign universities in order to facilitate the recognition of degrees and simplify the teaching–learning process. As such, HEIs have to revise their study programs in accordance with the best practices by referring to the Bologna Declaration, reorganizing the syllabus, expanding collaborations with foreign universities, and implementing the standards of globalization.

These reforms made to HE curricula respond to the three trends of HE globalization. Firstly, lifelong learning is a platform that offers the opportunity for training and ongoing qualification in every profession. Lifelong learning has become a widespread term over the years due to professionals always seeking new updates and wanting to improve their skills and extend their knowledge in their field of expertise and future careers. This phenomenon is led by the continuous development of technology and the necessity of adopting new functions and roles. This is the reason for adapting the curricula toward skills. Article 6/32 of the 2010 Law on Higher Education defines lifelong learning as following activities and/or educational programs in different periods of life with the aim of expanding knowledge to increase academic and/or professional skills.

Secondly, curricula are oriented toward employment. The current focus of higher education is to assure a more successful labor market as students are directed toward improving their skills and knowledge. This came as a necessity because many students were questioning the value of higher education; moreover, the changes in society and the increment of foreign collaboration also emphasized the need for relevant employers. In fact, the 2010 Law of Higher Education has made these elements part of the mission of higher education, with Point b of Article 1 calling for the formation of higher specialists as a mission.

Finally, one of the challenges considered in HE globalization is sustainability (Sart, 2022). In the global world, maintaining stability is a very important element of development. HEIs in Albania are taking another approach toward sustainability by integrating it into the university curricula. This action came as a necessity for raising environmental awareness and other issues related to climate change. This is sometimes offered as part of university curricula and sometimes through courses, workshops, trainings, or other projects.

Scientific Research

Scientific research is a fundamental tool in the development of every HEI. Beneficiaries are not just the HEI but also the students, professors, and communities. Due to globalization, the importance of collaboration and exchange has increased. Advances in science and technology have impacted even education and scientific research in universities. The impact of globalization has brought about the need to undertake actions and make changes in Albania's HE system.

The adoption of the new Law on Higher Education 80/2015 predicts not only a clear legal framework for regulating scientific research in Albania but also calls for special institutions that help in the implementation of projects in this area. DCM No. 607 was adopted on August 31, 2016, and title "On the Creation, Organization, and functioning of the National Agency of Scientific Research and Innovation (NASRI)." NASRI is a public institution that operates under MoES. NASRI aims not only to improve and strengthen the scientific research and initiatives of HEIs in this regard but also to provide an innovative and modern system in this field. Currently, NASRI supports HEIs in writing projects properly so that they can be funded; however, no specific body yet exists regarding this issue. Whether to create a specific office in each HEI that will be

responsible for writing qualitative and competitive projects for that HEI or to create a special body that will help all HEIs in Albania (public or non-public) in this regard has been discussed several times. However, no action has yet to be taken on this issue.

Meanwhile, Horizon 2020 was a program to which HEIs could apply to get funding for their projects in the scientific research field in accordance with the criteria and procedures defined by Horizon 2020. HEIs' participation in this program was the best since Albania started participating in the EU's Framework Programmes for Research and Innovation. By 2021, nine projects had successfully passed all the procedures and fulfilled all the criteria to gain a total funding of 1.9 million Euro (EU Progress Report, 2022). When this program came to an end, Albania adopted the new Horizon Europe 2022 program, and HEIs continued nowadays to apply for funding for different projects in the field of science, research, and innovation. Regarding the 2022 EU Progress Report, various estimates indicated Albania to have allocated 0.2%–0.4% of its GDP to research and development in 2021, which was far below the targeted 1% of GDP by 2022 when state budget funds for MoES scientific research were between 0.05% and 0.06% of its GDP (EU, 2022).

In addition to the developments Albania has made so far in this area, a methodology for establishing research and science funding remains to be developed, with many recommendations and initiatives still found to strengthen research and innovation capacities at a national level (EU, 2022). However, efforts are still needed to develop the Smart Specialisation Strategy (S3). This report on the MoES emphasized that both qualitative and quantitative analysis phases had been completed regarding the development of S3 and that the entrepreneurial discovery process had yet to be finalized. However, EU progress reports continuously emphasize the need to increase investments in scientific research in accordance with the priorities of the European Research Area and to improve S3's development.

A trend and goal that higher education institutions are working on today relates to brain circulation. This trend consists of the mobility of teachers and researchers, giving them the opportunity to make their contribution regardless of where they exercise their full-time activity. This enables personalities from certain fields to be present in higher education institutions in the form of guest professors, as presenting lecturers, or as researchers in laboratories and research centers. This trend has increased inclusiveness and interest in inter-institutional cooperation. NASRI has

made this practice part of its work plan, financing and inviting HEIs to propose projects in cooperation with institutions in the country and abroad.

Budget Allocation and Financial Support of Excellent Students

Employment is the key objective of every student who attends university studies. From the moment a student decides what to study, they already have a path to follow in their future career. The lack of a real SWOT analysis regarding the requirements of the market has led many students to make the wrong decision for their future. Moreover, students have not been motivated or supported enough by HEIs in Albania in this regard, whether financially during their studies or after they finish their studies. This is the reason why many professions are vanishing today and why young people do not want to attend certain study programs at university. However, the government has undertaken some legal actions to motivate and support students in improving their performance during university studies and moreover becoming employed after finishing their studies.

In addition, Albania's budget allocated to education has annually increased, even though the initiatives from the Albanian government have been weak until 2018 when students from public universities organized protests against the government and MoES, mostly due to high fees in universities and the lack of financial support for students and excellent students. The EU Progress Report (EU, 2022) declared the budget allocated to education in 2021 to have remained low at an estimated 3.6% of GDP, only 0.9 percentage points higher than in 2020.

Excluding secondary income, the funds of the line ministries for education, and the funds of local self-government units for education, the funds approved for MoES compared to the total budget expenditures for the period of 2021–2023 are expected to reach 7.6% in 2021, 7.8% in 2022, and 7.6% in 2023. Excluding secondary income, the funds of line ministries for education, and the funds of local self-government units for education, public funds for education compared to the gross domestic product went from 2.4% in 2019 to 2.5% in 2021, 2.4% in 2022, and 2.3% in 2023 (National Plan on European Integration 2022–2024, 2022).

As mentioned above, students from all public universities in Albania organized protests in 2018 for at least one month due to the high fees

they were paying to continue their university studies. After public consultation with HEIs, the government and MoES formed the initiative known as the Pact for University to financially support students, or at least facilitate their financial obligations. As such, the agreement was reached to increase the HE Budget to 5% of GDP and to allow the study fee for each study level to be halved, a 50% reduction in fees. To address the students' demands, the Council of Ministers on December 26, 2018, approved the amendments DCM 778/2018 titled "On the Approval of the Maximum Limit of the Annual Tuition Fee for Students Studying in Public Institutions of Higher Education, in a Program of the First Cycle of Studies, in an Integrated Program of Studies, or in a Full-Time Professional Studies Program," DCM 779/2018 titled "For Some Changes to DCM 269/2017 On Determining the Categories of Individuals Who Meet the Admission Criteria in a Program of the First Cycle of Studies, in an Integrated Program of Studies, or in a Program of Professional Studies that are Exempt from the Annual Tuition Fee," DCM 780/2018 titled "On Determining the Categories of Individuals Who Meet the Criteria for Waiving the Annual Study Fee in the Programs of the Second Cycle of Studies in Public Higher Education Institutions," and DCM 784/2018 titled "For Some Changes to DCM 903/2016 On Determining the Criteria for Benefiting from Scholarships from the Student Support Fund for Excellent Students, Students Studying in Study Programs in Priority Areas, and Students in Need" (Albanian Government Council of Ministers, 2019).

Moreover, students have faced ongoing reforms over the last decade, with each year introducing a new process of university enrollment. However, Albanian students have resulted to excelling at their study applications abroad despite the numerous changes to the education system sometimes confusing them. In addition, these developments have improved their skills of easily adapting to change, working hard to achieve their goals, evaluating the importance of education, and being chosen by one of the 15 best universities in the world (e.g., Harvard, Oxford, UCL, MIT, Stanford University, the University of California Berkeley, Imperial College London, ETH Zürich). On February 19, 2020, MoES adopted DCM 160/2020 titled "On the Financial Support of Excellent Students and Civil Servants (Excellence Fund);" this DCM provided financial support for students who had applied and were accepted to study in one of the best 15 universities in the world, as mentioned above. After receiving the acceptance letter from the university, students used to send a

complete folder with the necessary documentation called for in the DCM 160/2020 to MoES, accompanied by a request to get financial support from the government. The agreement between the students and MoES was focused on maintaining the quality of these students and making them great contributors to public administration and the private sector. In addition, students had to maintain an average GPA between 8–10 and B–A based on their field of study and had to return and contribute to their country after finishing their studies. This program has resulted in positive since the number of students who applied for financial support was growing each year. On the other hand, the number of students who were returning to contribute to their hometown was decreasing. Somehow, the aim of this DCM was vanishing (DCM 160/2020).

Therefore, to lower the level of the brain drain in Albania, MoES adopted a new policy regarding study programs in 2022 and the new DCM 386/2022 regarding the financial support of excellent students; however, now the financial support would be given to students attending public universities in one of the programs that are considered a national priority. According to DCM 386/2022, national priority programs are considered in such fields as the humanities, natural sciences, engineering, agriculture, and veterinary services. DCM 386/2022 also calls for students to benefit monthly from the minimum wage in Albania and to be exempt from university fees. The beneficiaries are categorized as students who've graduated from high school with a grade point average of 10 and a Matura exam score of over 9.5 for the study program they choose or a minimum average of 8.5 if they choose to study in one of the priority study programs, and graduate students who've won one of the first three places in international contests in which there are at least 15 participating countries. According to DCM 386/2022, students are legally obligated to work in the public sector for at least three years after graduation.

Due to 2023 being the first year this initiative has been implemented, its impact on the labor market is not yet clear. However, Albania has made considerable developments and improvements in the field of employment and student financial support, the effects of which are expected to increase. Moreover, the reforms in HE related to scientific research, curricula, and the founding of this sector are not enough. The laws, bylaws, and other legal measurements have helped in the adoption of EU and global standards, as well as the acquisition of the Bologna Declaration.

Mainly, the legal changes have been in response to the economic, social, and cultural conditions of Albania as a country. The reform itself analyzes the problems and proposes solutions and best practices. As a candidate country in the EU, Albania has been subjected to reforms and changes time after time, with the aim of achieving the best standards and providing a high-quality and competitive education. The challenge of globalization is even more tangible in HEIs, especially nowadays when the academic offer is easily accessible and presents an infinity of choices and alternatives. During these years, Albania has made a great safe step forward. Challenges are still present, but so are opportunities for providing better solutions. The balances that are kept are related to the HEI-student–labor market trinomial.

Conclusions

In summary, the changes made to the Albanian higher education system due to Europeanization and globalization have been insufficient at adopt the standards of the European Union. HEIs must review the lesson plans and the European approach regarding the teaching–learning process, as well as properly implement the Bologna Declaration. Degrees and syllabuses HEIs offer need specific regulations, and the process of recognizing these degrees needs to be facilitated, as doing so will increase the collaboration with foreign European HEIs.

Moreover, reforms in curricula are more than a necessity to respond to the three trends of higher education globalization. These three trends relate to lifelong learning, employment, and sustainability. Firstly, lifelong learning must be led by the necessity of adopting new functions and roles. This is the reason for adopting the curricula toward skills with the aim of expanding knowledge to increase academic and/or professional skills. On the other hand, Albanian HEIs' focus must assure a more successful labor market, as students are being directed toward improving their skills and knowledge. Finally, maintaining stability is a very important element for developing Albanian HEIs. Reforms in the education sector have to be done by taking into consideration institutions' profiles, as well as their demographic, economic, and social development. Universities' profiles create space for better achievement of goals and also assure stability.

However, the legal changes have occurred in response to Albania's economic, social, and cultural conditions. The HE reforms have improved the issues that have been identified throughout the years and suggested

solutions and best practices for different procedures in curricula, the labor market, and lifelong learning activities. Despite the progress that Albanian HEIs have made so far, room still is found for new opportunities and improvement in order to fully adopt the required standards.

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More Internationalization, More Innovation: The Case of Canadian Teacher Training Programs

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Introduction

With many educators realizing internationalization's potential to improve innovation and raise the quality of education, an increasing emphasis on internationalization in teacher training programs and curricula has occurred in recent years (Acedo, 2012; Larsen, 2016; Olmedo & Harbon, 2010). Internationalization is crucial for teachers to be able to adjust their teaching methods to the various needs of students from all cultures and backgrounds as globalization continues to change the globe. According to a report by the Organisation for Economic Co-operation and Development (OECD, 2004; as cite in Hénard et al., 2012), internationalization encompasses the integration of intercultural and international elements into the curriculum, teaching practices, research, and extracurricular activities. This approach helps students develop international and intercultural

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skills without ever leaving their country. Mikulec (2014) stated that the internationalization of teacher education can foster innovation and enhance quality in preparing teachers.

Canada has long been renowned for its multiculturalism and welcoming approach toward immigration. This reputation has positioned Canada as a model for coexistence among individuals from diverse backgrounds. Notably, Canada was the first country to implement an official multiculturalism policy, which has contributed to its positive global perception (Watt, 2016). Moreover, the *Accord on the Internationalization of Education*, released by the Association of Canadian Deans of Education (2014), emphasizes the significance of internationalization in teacher education within Canada. Canada has made significant strides in promoting internationalization in its education system, with many universities and colleges offering programs that provide opportunities for students to gain international experience and an international perspective (Guo & Guo, 2022). As such, this study uses the case of Canada to reveal the relationship between internationalization and innovation in teacher training programs.

The aim of this study is to provide a comprehensive overview of the complex interactions between internationalization and innovation in Canadian teacher education and curriculum. Examining this interaction in Canadian teacher training programs can help one gain a better understanding of the potential benefits and challenges of increasing internationalization. This study will utilize a wide array of sources, encompassing research findings and reports from educational institutions and organizations. These sources will be employed to investigate the diverse ways in which internationalization is influencing teacher education in Canada. Additionally, the study will examine how internationalization contributes to fostering greater innovation within the curriculum. By drawing on these sources, a comprehensive understanding of the impact internationalization has on teacher education and its role in driving curriculum innovation in Canada can be attained.

Internationalization and Innovation

Before delving into Canadian teacher training programs, establishing clear definitions of the terms internationalization and innovation is essential. Internationalization in the context of education encompasses the integration of an international, intercultural, and global perspective into

various educational practices such as teaching, research, and curriculum development (Acedo, 2012; Strielkowski et al., 2021). This involves a range of activities, including international student and faculty exchanges, collaborative research initiatives with international partners, and the infusion of international viewpoints into course content. According to Strielkowski et al. (2021), the primary rationale for the internationalization of higher education is to foster a more cooperative, equitable, and democratic global community. For instance, attracting foreign students aims to enhance academic, cultural, and educational interactions with other nations, as well as to increase the international competitiveness of local universities (Wihlborg & Robson, 2018). The ultimate objective of internationalization is to prepare students for a globalized world by exposing them to diverse cultures and perspectives while equipping them with the necessary skills and knowledge to thrive in an increasingly interconnected global landscape.

In the context of education, innovation pertains to the generation of fresh and creative ideas, practices, and approaches that lead to positive transformations (Foray & Raffo, 2014). It encompasses the development of novel concepts and solutions that bring about change (Havelock, 1973). According to the OECD (2017), innovation is defined as the active pursuit of creative and innovative solutions to tackle significant challenges. It involves approaching these challenges with an open and exploratory mindset, coupled with disciplined experimentation. In line with this, Serdyukov (2017) has provided a comprehensive definition of innovation as a process that goes beyond existing practices and involves the generation of fresh ideas that enable one to carry out tasks in novel ways. This definition emphasizes the importance of breaking free from conventional approaches and fostering a mindset of creativity and originality in order to drive innovation.

Innovation in education can manifest in various forms, including the adoption of new teaching methods, the integration of technology in the classroom, and the creation of innovative curriculum materials. The fact that innovation is typically built upon existing research and the advancement of knowledge rather than being research in itself is important to note (Foray & Raffo, 2014). The overarching aim of innovation is to enhance the quality and effectiveness of education by empowering educators to adapt to changing circumstances and better meet the needs of their students.

The relationship between internationalization and innovation is complex and multifaceted, and they are highly connected (Kyläheiko et al., 2011). One of the primary means of cultivating innovation capabilities is widely acknowledged to occur through internationalization (Du et al., 2022). While internationalization is essential, emphasizing the significance of innovation within the internationalization process in the field of education is equally important (Wilson et al., 2011). This highlights the need to go beyond the mere integration of international perspectives and practices and to actively promote innovative approaches that contribute to educational advancements and positive change.

The increased internationalization of education can indeed foster greater innovation in the field. Through exposure to diverse perspectives, ideas, and approaches from various parts of the world, internationalization stimulates creative thinking and generates new ideas for educational reform. Educators and students benefit from being informed about the latest findings and developments based on global contexts, enabling them to integrate innovative perspectives into their teaching practices and contribute to the enhancement of educational programs. One example of this is evident in the OECD's (2017) handbook for innovative learning environments, which highlights a tool for expanding upon learning principles through a spiral of inquiry that originated from collaborative efforts among educators in British Columbia, Canada, and New Zealand. This tool, developed as a result of international networks and the influence of internationalization in education, illustrates how creative initiatives emerge and contribute to innovation in teaching practices. The Canadian case serves as a compelling example of how internationalization nurtures collaboration and fosters innovative approaches within education.

Additionally, innovation in education has the potential to drive internationalization (OECD, 2016). As educational reform initiatives embrace innovative perspectives, they often seek partnerships and collaborations with institutions and organizations worldwide. This pursuit of innovative practices can result in increased internationalization as educators and students collaborate on developing new approaches to teaching and learning that incorporate global perspectives and best practices (OECD, 2016; University of Waterloo, 2020). Hence, internationalization and innovation can be viewed as mutually reinforcing, with each aspect driving and facilitating the other. The relationship between innovation and internationalization can be summarized as follows: Internationalization represents a form of innovation, and successful internationalization

utilizing advanced knowledge necessitates innovation (Williams & Shaw, 2011).

Internationalization in Teacher Training and the Curriculum of Canada

Gaining a general understanding of Canada's teacher preparation system is beneficial for comprehending how Canadian teacher education and curriculum have embraced internationalization. While the federal government plays a role in education investments and policies, the responsibility for teacher education programs in Canada lies with the individual provinces (Sheehan & Fullan, 2013). Therefore, each of the 10 provinces and three territories has different teacher education programs. While differences occur in the curriculum offered in different programs, students generally speaking qualify to teach by earning a bachelor's degree and a concurrent or sequential Bachelor of Education degree at a university-based faculty of education (Connelly & Clandinin, 2004; Van Nuland, 2011). For instance, prospective teachers in the province of British Columbia are required to complete a bachelor's degree followed by a one-year teacher education program (British Columbia Ministry of Education, 2022; Milford et al., 2022).

The internationalization of teacher training and curriculum has become an increasingly important topic in Canada's education system. Therefore, Canada has started to take actions to equip teachers with the skills and knowledge needed to prepare their students for success in an interconnected world. One of the most important education declarations regarding internationalization is the Canadian Association of Education Deans' (2014) Agreement on the Internationalization of Education. One of the main factors in the increased attention to this internationalization is that linguistic, cultural, and racial diversity has become a prominent feature of the school environment due to the changing demographics in Canada (Ryan et al., 2009). The reason for this is that Canada is a multicultural country whose ethnic and cultural diversity has been formed over time by immigrants as well as the First Nations (Larsen, 2016). In 2019, the Canadian government launched the International Education Strategy titled "Building on Success: Canada's International Education Strategy (2019–2024)," which aims to increase the number of international students studying in Canada, as well as to enhance the global competencies of Canadian students and educators (Government

of Canada, 2019). As part of this strategy, the government has increased funding for internationalization initiatives in teacher training programs and encouraged partnerships between Canadian and international institutions. According to this report, the importance of internalization in the Canadian education system is how it supports international learning experiences through study- and work-integrated learning. Thus, it can reinforce the values of openness and inclusion that are the hallmark of Canada's success as a diverse society.

Canadian universities and colleges have been quick to respond to the government's call for increased internationalization in teacher training. Numerous institutions have introduced fresh courses and programs to aid teachers in enhancing their knowledge of international issues and incorporating them into their lessons (Hill et al., 2020). For example, the University of British Columbia offers a Bachelor of Education (BEd) International Baccalaureate (IB) Educator Stream within the Teacher Education Office (TEO), which became Canada's first teacher education program recognized by the International Baccalaureate Organization (IBO) in 2014. This program is designed to engage teacher candidates with a rich experience regarding teaching and leading in international contexts. Educational reforms have also been implemented to ensure that internationalization is integrated into the teacher training curriculum. For instance, the British Columbia Ministry of Education has developed a Global Competencies Framework (British Columbia Ministry of Education, 2015, 2017), which outlines the specific competencies that students need to develop to succeed in a globalized world. The framework has been integrated into the curriculum for all grades and subjects, ensuring that students are exposed to international perspectives throughout their education.

In conclusion, Canada has acknowledged the significance of internationalization in education and has taken steps to improve teacher training in this realm. Through increased funding, the introduction of new courses and programs, and the integration of global competencies into the curriculum, Canada has made considerable efforts to ensure that teacher candidates are well-equipped to thrive in an interconnected world. These educational reforms reflect Canada's commitment to preparing educators who can effectively engage with diverse perspectives, foster cross-cultural understanding, and navigate the challenges and opportunities presented by globalization. By prioritizing internationalization in teacher training,

Canada is striving to create a strong foundation for educational excellence in an increasingly interconnected and interdependent global landscape.

Innovation in the Teacher Training and Curriculum of Canada

The commitment to internationalization has led to substantial transformations within the Canadian education system, specifically in its teacher training and curriculum. These changes have sparked the emergence of innovative ideas, strategies, and practices in education. In line with promoting further innovation, the Canadian government has implemented educational reforms in recent years to enhance its teacher training and curriculum. These reforms have been driven by the recognition of internationalization as a catalyst for change and improvement within the education system. The government's initiatives reflect a dedication to fostering a dynamic and forward-thinking educational environment that prepares students and educators for the challenges and opportunities of a globalized world. Through these efforts, Canada is actively working toward cultivating a culture of innovation and excellence in education.

From policy to practice, the implementation of educational reforms is currently in progress in several Canadian provinces, including Alberta, Ontario, British Columbia, and Saskatchewan (Alberta Teachers' Association, 2012; British Columbia Ministry of Education, 2012). These provinces have been prioritizing twenty-first-century skills for several years, and each of them has policy documents that require schools and school boards to focus on developing integrated technology skills, cross-curricular competencies, and entrepreneurial and economic outcomes (Burns, 2017). Moreover, the provinces have identified communication and collaboration as foundational abilities that can drive student achievement (Alberta Teachers' Association, 2012; British Columbia Ministry of Education, 2012). For example, the Ministry of Education in Nova Scotia created a policy document called Nova Scotia's Action Plan for Education 2015: The 3R's: Renew, Refocus, Rebuild (Nova Scotia Ministry of Education, 2015) to reform the education system. This plan has four main pillars that include modernizing the education system, introducing an innovative curriculum, promoting inclusive school environments, and achieving excellence in teaching and leadership. These pillars are in line with the twenty-first-century skills and competencies (Burns, 2017).

Many teachers' education programs in Canada have incorporated curriculum content related to various aspects of cultural awareness and equity, such as multicultural, culturally responsive, intercultural, anti-racist, and global citizenship education (Campbell, 2021; George et al., 2020; Larsen, 2016). As an example of innovation, the Faculty of Education at Simon Fraser University has made equity a top priority in their teacher education program to create a new vision for the field. They have encouraged instructors to be adaptable in meeting the diverse needs of their students during times of uncertainty, offered emotional support to teacher candidates, and provided financial assistance to those who require it (Hill et al., 2020). Regarding curriculum, the British Columbia Ministry of Education in 2012 emphasized a flexible curriculum through its program Enabling Innovation: Transforming Curriculum and Assessment, which allows for more creativity and innovation among teachers and students (British Columbia Ministry of Education, 2012). The goal was to eliminate barriers that prevent teachers from tailoring learning to meet the specific needs of students and their communities, which is essential for an education system that prioritizes twenty-first-century skills. The proposed changes focus on competencies that will prepare students for the future, with fewer but more important learning outcomes. Teachers will also have greater flexibility to innovate and personalize learning in their classrooms. The new curriculum prototype follows this approach, providing a framework that emphasizes personalized learning, creative thinking, and collaboration while minimizing prescribed learning outcomes. This approach allows for greater innovation and personalization based on the needs of diverse learners in a variety of contexts. The updated curriculum in British Columbia places greater emphasis on inclusive teaching practices and pedagogy that support diversity in the classroom (Milford et al., 2022). This approach prioritizes removing barriers to learning and promoting inclusion, with a focus on asset-based and growth-oriented models that enable all students to advance. The new curriculum promotes personalized learning, classroom flexibility, and teaching approaches that encourage students to become well-rounded, critical thinkers, and lifelong learners. This shift toward competency-based learning over time represents a departure from a content-heavy curriculum, providing greater flexibility and choice for teachers and students alike. This flexibility allows teachers to be more creative and innovative in designing learning experiences. The revised curriculum also supports the needs of all students, including those with diverse learning

needs. Overall, the new curriculum in British Columbia offers a less prescriptive approach, empowering teachers and students to make meaningful choices and fostering creativity and innovation in the classroom (Milford et al., 2022).

Consequently, Canada has made significant steps toward promoting innovation in teacher training and curriculum so as to align with the changing needs of society. The government has implemented educational reforms that prioritize twenty-first-century skills, multiculturalism, equity, and inclusivity (Government of Canada, 2019). Canadian provinces such Alberta, British Columbia, Ontario, and Saskatchewan have adopted policies that focus on developing integrated technology skills, global citizenship, competency-based skills, and classroom flexibility. Specifically, the new curriculum in British Columbia (especially in 2012, 2015, and 2017) provides a framework that emphasizes personalized learning, creative thinking, and collaboration, while minimizing prescribed learning outcomes, thus empowering teachers and students to make meaningful choices and fostering creativity and innovation in the classroom. By focusing on inclusive teaching practices and pedagogy that support diversity in the classroom, the new curriculum in BC places a greater emphasis on removing barriers to learning and promoting inclusion, prioritizing asset-based and growth-oriented models that enable all students to advance. All in all, innovation in the Canadian education system, especially in teacher training and the curriculum, appears to have been influenced by internationalization initiatives (Guo & Guo, 2022).

Shifting Paradigm in Curriculum: Education That Is Gifted

British Columbia also introduced some other educational reforms to increase educational quality and innovations in education such as a redesign of the curriculum in 2015 (British Columbia Ministry of Education, 2015) and the development of a new Individualized Education Plan (IEP) in 2016 (British Columbia Ministry of Education, 2016). The significance of these two reforms is that they emphasize the need to address the cognitive, intellectual, emotional, and behavioral needs of all students without distinction between those who require special education and those who do not. According to Lo et al., (2019, 2022), this reform was an important step in making the general education curriculum more "gifted," because the paradigm regarding giftedness is shifting

from person-based approaches (i.e., identifying giftedness) to process-based approaches (i.e., transacting giftedness). Therefore, this reform has the potential to have education become more gifted for every student, rather than being simply gifted to other special groups (e.g., by using an enriched program, emphasizing competency-based skills, and boosting talents). These innovative concepts center around the idea of providing all students with enriched educational possibilities. Put another way, it promotes an education that is gifted, one in which all students are inspired and helped to develop their gifts in a stimulating learning environment (Lo et al., 2019; Meyer & Plucker, 2021; Saglam et al., 2023). Therefore, the student-centered approach in reforms requires a shift in mindset toward the belief that all students can learn and that all teachers can teach them, provided they have the right support (British Columbia Ministry of Education, 2017). The new format of British Columbia's Individualized Education Plan has been designed to identify and address student strengths and needs in each domain, thus providing a more comprehensive and personalized approach to education planning (Milford et al., 2022).

According to the British Columbia Ministry of Education (2015), these reforms emphasize personalized learning and support the competencies and skills students need. The reforms also mention core competencies, concept-based and competency-driven learning approaches, flexibility, diversity, and inclusiveness. The reforms aim to have every student find themselves prepared as a critical thinker and lifelong learner as a result of the reforms (Milford et al., 2022). This also indicates that one of the goals of the reforms is to establish an open system that recognizes, accepts, and fosters the development of many different kinds of intelligence, abilities, and strengths (Lo et al., 2019). These reforms (British Columbia Ministry of Education, 2015, 2016) state that every student learns with different styles, at different rates, and in different ways; therefore, the curriculum needs to offer highly engaging high-quality learning opportunities for all students. The reforms emphasize giving students' opportunities that meet their needs so they can develop their potential (Lo et al., 2019).

The educational reforms the British Columbia Ministry of Education introduced in 2015 and 2016 can indeed be seen as innovative and aligned with the principles of internationalization in education. These reforms signify a paradigm shift in the understanding of giftedness and promote an inclusive and diverse educational system that recognizes and

nurtures different types of intelligences, abilities, and strengths. The focus on personalized learning, competencies, skills development, flexibility, and inclusiveness reflects innovative approaches in education. These reforms acknowledge the importance of individualized learning experiences that cater to the unique needs and strengths of each student. By prioritizing competencies and skills, the reforms recognize the importance of preparing students for the demands of the twenty-first century, a century where critical thinking, adaptability, and lifelong learning skills are highly valued. Furthermore, the emphasis on inclusiveness and diversity aligns with the principles of internationalization, which emphasize the importance of creating inclusive learning environments that celebrate and value students' diverse backgrounds and abilities. The reforms aim to provide high-quality learning opportunities for all students, including those with special education needs, and strive to ensure that every student can reach their full potential. By embracing these innovative changes, British Columbia's educational reforms contribute to the internationalization of education by aligning with global trends and best practices. These reforms demonstrate a commitment to providing an education system that prepares students to thrive in a globalized world, where intercultural competence, open-mindedness, and adaptability are crucial. Overall, the educational reforms the British Columbia Ministry of Education has introduced serve as a noteworthy example of how internationalization and innovation can work hand in hand to enhance the quality of education and foster the development of well-rounded, engaged, and globally competent learners.

Conclusion

The Canadian education system has made significant investments to enhance the quality, inclusivity, and innovation of education through internationalization, which is one of the crucial education agendas. The implementation of educational reforms in Canada has not only focused on improving the quality of teacher training but also aimed to provide teacher candidates with valuable experiences in teaching in an international context. The introduction of programs like the "International Baccalaureate (IB) Educator Stream" at the University of British Columbia (UBC) serves as an example of how institutions are offering specialized courses and programs to prepare educators for the globalized world.

In terms of curriculum, the educational reforms influenced by internationalization in Canada have prioritized a student-centered approach that aims to develop competencies and address the diverse needs of learners. The focus on individualized education plans that consider students' cognitive, emotional, and behavioral aspects reflects a commitment to inclusivity and personalized learning experiences. These reforms have contributed to a more diverse educational system in Canada, attracting a greater number of international students and fostering partnerships between Canadian and international universities. The recruitment of international students and the establishment of partnerships with institutions from around the world further contribute to the internationalization of the Canadian education system. These collaborations provide opportunities for cross-cultural exchange, knowledge sharing, and the integration of innovative practices from different educational contexts. Overall, the Canadian educational reforms demonstrate a commitment to internationalization by providing teacher candidates with international teaching experiences, promoting student-centered approaches, and fostering diversity and partnerships. These efforts contribute to the enhancement of educational quality, inclusivity, and innovation, ultimately preparing students and educators for success in an interconnected and globalized world.

Moreover, the sharing of knowledge, best practices, and ideas between Canadian and foreign educators has played a crucial role in fostering innovation in the Canadian educational system. By engaging in international collaborations and exchanges, educators have been able to learn from different educational contexts, gain new insights, and adopt innovative pedagogies and approaches. The integration of students' diverse cultural backgrounds with their academic needs has also contributed to the development of new teaching and learning methods. Educators have been able to draw on a wide range of perspectives and experiences to create inclusive and effective learning environments. This cultural diversity has sparked innovative approaches to instruction, assessment, and curriculum design that cater to the unique needs and strengths of each student.

As a result of internationalization's effect on the education curriculum in Canada, the focus on personalized learning and flexible curriculum has been instrumental in promoting innovation in the Canadian education system. By recognizing that students have different learning styles, interests, and goals, educators have been able to design learning experiences that are tailored to individual needs. This approach empowers

students to take ownership of their learning and fosters critical thinking, creativity, and lifelong learning skills. Furthermore, the integration of technology in education has been a catalyst for innovation. The use of digital tools, online resources, and educational technology platforms has opened up new possibilities for interactive and engaging learning experiences. Teachers have embraced digital resources and innovative teaching methods to enhance instruction, collaborate with colleagues, and provide personalized feedback to students.

In summary, the sharing of knowledge and ideas through internationalization, combined with a focus on personalized learning and the integration of technology, has indeed been instrumental in driving innovation in the Canadian education system. As a result, new pedagogies, technology-enhanced learning environments, and flexible curriculum approaches have emerged, equipping students with the skills they need to thrive as critical thinkers and lifelong learners in an ever-changing world. This commitment to innovation and student-centered education reflects the ongoing efforts to enhance the quality, inclusivity, and effectiveness of the Canadian education system through internationalization.

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