

Kurdistan Region of Iraq

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Introduction

In 2007, the Kurdistan Regional Government (KRG) embarked on a comprehensive reform of its kindergarten through Grade 12 (K–12) education system, reflecting a strong commitment to enhance the quality of education for all children. This transformative initiative was driven by the urgent need to modernize an outdated curriculum, upgrade school facilities, and improve the overall quality of instruction. As part of the reform, education was made compulsory up to Grade 9, an increase from the previous requirement of Grade 6. A new, more rigorous curriculum was introduced, with phased implementation ensuring a smooth transition.

A key aspect of the reform was the introduction of multilingual education, with students learning English and Arabic in addition to Kurdish from basic school onward. The structure of the education system was also revised, streamlining the previous three levels (primary, intermediate, and secondary) into two levels: basic (Grades 1 to 9) and preparatory (Grades 10 to 12). To further enhance the quality of teaching, new requirements were established for educators, mandating that all prospective teachers must obtain a bachelor's degree.

These reforms were expected to have a profound impact on future student enrollment, the need for additional schools, and the demand for qualified teachers. The changes necessitated adjustments in teaching practices and were expected to foster positive behavioral changes among school principals, teachers, parents, and students.

Through these reforms, the KRG aimed to address critical challenges such as overcrowded classrooms and an outdated education framework, ultimately striving to improve educational outcomes and better prepare students for higher education and future employment opportunities. The introduction of the new curriculum has been designed to support an adaptation process for all stakeholders involved.

Overview of Education System

The education system in the Kurdistan Region is structured across various levels to ensure inclusive and quality education for all. It begins with kindergarten (KG1 and KG2), focusing on foundational social interaction and cognitive development. Basic education spans Grades 1 to 9, emphasizing core subjects and life skills essential for personal and societal participation. Preparatory education (Grades 10 to 12) offers specialized subjects, preparing students

for higher education or vocational college pathways. Additionally, technical and vocational education and training (TVET) schools and institutes provide hands-on training in various trades.

In the Kurdistan Region, the Ministry of Education, in collaboration with stakeholders, tries to ensure equitable access to quality education for all children, regardless of their religious background or nationality. The foundation of this effort is the standardization of mathematics and science curricula across both public and private schools, facilitated by the Ministry's guidance. This standardized approach fosters consistency and coherence in learning outcomes, promoting education equity. It is important to note, however, that private international schools may adopt alternative curricula to cater to the diverse needs of their student populations. Despite this flexibility, the number of international schools in the Kurdistan Region remains limited, with no more than 50 such schools serving various communities across the region.

In line with the principles of decentralization and local empowerment, the governance structure of the education system in the Kurdistan Region ensures a balance between central oversight and autonomy at the grassroots level. While the Ministry of Education and the Council of the Ministry set overarching policies and priorities, schools and local authorities are empowered to address community-specific needs and challenges.

Use and Impact of TIMSS

Historically, the Ministry of Education of the Kurdistan Region has not engaged in international assessments such as TIMSS. However, recognizing the transformative potential of benchmarking its education system against global standards, the Ministry has recently embraced participation in TIMSS. By actively participating in this assessment, the Kurdistan Region seeks to gain invaluable insights into the quality and effectiveness of its education system compared to international benchmarks. The data derived from these assessments serve as indispensable tools for policymakers and educators, enabling them to identify areas of strength and areas in need of improvement within the education sector. Equipped with this evidence-based knowledge, the Ministry is empowered to enact targeted policy reforms, rectify ineffective practices, and bolster education initiatives highlighted by the assessment findings. Ultimately, participation in TIMSS underscores the Kurdistan Region's commitment to advancing education quality, fostering equitable learning opportunities, and ensuring that every child receives a quality education.

The Mathematics Curriculum in Primary and Lower Secondary Grades

The mathematics curriculum in the Kurdistan Region adopts an incremental learning approach, ensuring that students develop essential mathematical literacy from early childhood to preparatory grades. In early childhood education and the initial stages of basic education, children begin with fundamental mathematical concepts such as counting and basic arithmetic operations. Students then gradually progress to learning more complex mathematical concepts

as they advance through the education continuum. The mathematics subject continues into preparatory education, providing students with opportunities to deepen their understanding and engage with more advanced concepts as the curriculum integrates practical applications and is aligned with international standards, thus preparing students for further academic pursuits or vocational pathways.

Teacher Professional Development Requirements and Programs

The Kurdistan Ministry of Education prioritizes teacher professional development (TPD) to enhance instruction quality and pedagogical expertise. Through a comprehensive 6-year road map, educators receive specialized training in core subjects, particularly mathematics and science. The initiative emphasizes collaboration with national and international stakeholders to integrate global expertise and best practices into the education ecosystem, fostering a culture of lifelong learning and academic achievement.

Suggested Reading

Constant, L., Culbertson, S., Stasz, C., & Vernez, G. (2014). *Improving technical vocational education and training in the Kurdistan Region—Iraq*. RAND Corporation. Retrieved from https://www.rand.org/pubs/research_reports/RR277.html

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