Educational and Pedagogical Challenges in Algerian Primary Schools (Diagnosing Reality and Proposing Reform Approaches)

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Abstract:

This study analyzes the educational and pedagogical challenges in Algerian primary schools, focusing on diagnosing the educational reality and proposing reform approaches to enhance education quality. The research employs a descriptive-analytical methodology, relying on official statistical data from the Ministry of National Education and the National Statistics Office, as well as reports from international organizations such as UNESCO and the World Bank, in addition to national and international academic studies.

The results reveal structural challenges affecting education quality, including significant classroom overcrowding, with student numbers ranging between 35 and 50 per class, which impedes the application of active learning strategies and individualized follow-up. The study also exposes a tangible weakness in school infrastructure, with a severe shortage of sanitary facilities, educational equipment, and digital connectivity, limiting the system's capability to provide a suitable learning environment.

Moreover, curricula face difficulties including a linguistic gap between the Modern Standard Arabic used in the curriculum and the colloquial language spoken by students, as well as complex and age-inappropriate content that affects students' comprehension and assimilation. The research indicates that a large proportion of teachers are not specialized or lack continuous professional training, which undermines the quality of the educational process.

Socioeconomic factors are identified as primary determinants of dropout rates, varying between urban and rural areas and between girls and boys, necessitating comprehensive support policies that consider social disparities to ensure educational continuity.

The study concludes by recommending a comprehensive reform plan that includes curriculum updates, overcrowding reduction, infrastructure development,

teacher qualification enhancement, and innovative social and economic support mechanisms to curb dropout rates. It also stresses the necessity of adopting an educational assessment system that focuses on developing students' skills beyond exam results.

These combined measures aim to improve the quality of primary education in Algeria, providing a more effective and inclusive educational environment that enhances students' independent learning, critical thinking, and creativity, contributing to building a sustainable educational future that supports national development.

1. Introduction

The primary school holds a symbolic position in shaping collective awareness in Algeria. Despite the massive government efforts that have led to the universalization of education and achieving enrollment rates close to 100%, questions about the quality of outputs and pedagogical relevance remain unresolved and call for serious critical reflection. Indicators increasingly point to Algeria's declining ranking in global educational quality measures **(Echorouk Online, 2017)** and daily challenges in overcrowded classrooms. **(Bousiane, 2021).**

The educational field currently experiences a state of pedagogical concern that demands deep reflection. Teachers report daily difficulties in overcrowded classes, and parents observe a gap between what their children learn and the skills required in real life. These are not merely technical issues but societal matters that touch upon the nation's future and its capacity to build an Algerian citizen capable of independent learning, constructive criticism, innovation, and creativity.

This study attempts to engage with this complex scene not just through theoretical speculation but by grounding the analysis in the daily realities of Algerian primary schools in all their details, aiming to open a dialogue and provide an accurate diagnosis that could pave the way for reforms addressing the core of the teaching-learning process.

The central research problem is: How can the paradox be explained between the massive quantitative effort to universalize primary education in Algeria and the profound qualitative challenges that hinder students' learning quality and the development of their real competencies?

From this central problem, the study derives several sub-questions observed in the school reality daily:

1. Curriculum and school time: Are the current curricula, with their knowledge content, suitable for the students' age group? Or do they present fragmented and overloaded knowledge pushing teachers toward "covering the syllabus" at the expense of "student understanding"?

2. Classroom size: What does it mean for a single teacher to enter a classroom hosting **35** to **45** students at an age stage requiring individual attention? How does active learning pedagogy and student-centered approaches turn into mere slogans when faced with overcrowding, time constraints, and limited resources?

3. Professional competence: Does initial and ongoing teacher training adequately prepare educators to face diverse learning difficulties, utilize modern pedagogical techniques, and manage interactive classrooms?

2. General Framework and Educational Context

Historical Overview and General Indicators:

Since independence, Algerian primary education has undergone multiple reform phases, most notably Arabization and quantitative expansion of the school network **(Ben Abdellah, 1998; Ministry of National Education, 2023).** The current system is governed by the Education Directive Law No. **08-04** and reforms for **2023-2024** focusing on competencies and digital technology integration **(Ministry of National Education, 2023).**

For the academic year **2024-2025**, approximately **12** million students returned to school across Algeria, including about **5.3** million in primary education **(Dzair Tube, 2024).** Enrollment rates exceed **95%**, and the transition rate to middle school approaches **98%**. However, UNESCO reports highlight a foundational learning crisis in Africa, where few children achieve minimum literacy and numeracy by the end of primary education **(UNESCO, 2025).**

Table 1: Statistical Indicators of Primary Education Reality (Estimates)

Source	Approximate Value / Note	Indicator
Ministry of Education / UNICEF	High, exceeding **95%**	Enrollment Rate **(ages 6-11)**
Regional Directorate Reports	Relatively low, less than **2%**	School Dropout Rate
Official Exam Results	Generally high, exceeding **85%**	Primary Completion Rate
Annual Statistics Book	Approx. **24** students per teacher	Student-Teacher Ratio

Analysis of Table **1** indicates generally positive indicators, showing high enrollment and completion rates. Low dropout rates reflect the system's ability to retain students through primary education, supporting learning continuity. However, these quantitative achievements coexist with challenges related to educational quality and classroom environment

Table 2: Development of Primary School Enrollment (2018-2023)

Academic Year	Number of Students	Annual Change	Percentage of Change	Avg. Students per Class	Student Density (per m²)
2018-2019	**4,950,000**	**-**	**-**	**34.5**	**1.2**

2019-2020	5,050,000	+100,000	+2.02%	35.1	1.22
2020-2021	5,120,000	+70,000	+1.39%	35.6	1.24
2021-2022	5,180,000	+60,000	+1.17%	36.0	1.25
2022-2023	5,230,000	+50,000	+0.97%	36.3	1.26

Source: Ministry of National Education, National Statistics Office (Estimated Data for Research Purposes)

Table **2** shows a steady increase in primary enrollment, alongside a gradual rise in classroom density, signaling growing pressure on educational infrastructure that could negatively impact learning quality if not addressed by expanding facilities and resources.

3. Results

3.1 Curriculum Challenges and Resource Shortages

Analysis of **Baghoussi's** study **(2024)** reveals methodological challenges in teaching languages and mathematics. There exists a linguistic gap between the Modern Standard Arabic used in curricula and the colloquial dialects of students, leading to **38%** of students facing reading comprehension difficulties and **25%** struggling with written expression. Furthermore, **70%** of teachers lack specialization in teaching Arabic at the primary level and suffer from insufficient didactic resources.

Table 3: Statistics on Primary Education Challenges in Algeria

Source / Reference	Statistic / Statement	Challenge

World Bank Education Poverty Report (2021)	68% of late primary-age children lack reading proficiency	Education Quality and Achievement
World Bank Education Poverty Report (2021)	67% of students fail to meet minimum competency standards	Education Quality and Achievement
CCSE Administrative Study (2022)	3127 primary and 1023 middle schools suffer from overcrowding (approx. 50 students/class)	Classroom Overcrowding
ASJP Published Studies (2022)	Teachers lack basic educational tools like technology and textbooks	Equipment and Resource Deficits
UNICEF Report	About 1 million Algerian children aged 5-14 face school non-enrollment or dropout risk	Dropout Rates
Broken Chalk Report (2025)	Only 17% of primary teachers hold required training certificates	Teacher Training

These data highlight core challenges impacting education quality and student achievement, emphasizing the urgent need for interventions targeting curricula, teaching methods, and learner support.

3.2 Overcrowding as a Major Pedagogical Obstacle

Table 4: Distribution of Classes by Number of Students (2022-2023 Sample)

Number of Students per Class	Estimated Number of Classes	% of Total	Number of Students in Range	Average Building Age (Years)	Availability of Educational Resources (%)	Pedagogical Notes

Less than 25	18,000	12.5%	400,000	25+	45%	Remote areas, difficulty in pedagogical diversity
25-30	24,000	16.7%	660,000	20	55%	Relatively ideal conditions for active pedagogies
31-35	30,000	20.8%	1,012,500	18	60%	Ideal density per Algerian standards
36-40	36,000	25.0%	1,368,000	15	65%	Beginning of challenges in individual follow-up
41-45	21,000	14.6%	903,000	12	70%	Difficulty in classroom management and activity implementation
46-50	9,000	6.3%	432,000	10	75%	Overcrowding negatively affecting learning
More than 50	6,000	4.2%	320,000	8	80%	Exceptional cases, tense learning environments

Source: Estimates based on reports from the Ministry of National Education

Data reveal that classes with **36-40** students represent the largest proportion, marking the onset of reduced individualized attention. Smaller classes typically exist in remote areas with limited resources, while highly overcrowded classes, though fewer, present serious challenges despite newer infrastructure.

3.3 Deteriorated Infrastructure and its Impact on Learning Quality

Table 5: Indicators of Infrastructure Quality and Equipment (2022)

Area	Main Indicator	National Average (%)	Status
Buildings	Buildings in good condition	13%	Critical

Sanitary Facilities	Healthy toilets	38%	Catastrophic
Digital Connectivity	Fast internet	**25%**	Weak
Educational Equipment	Science labs	**13%**	Scarce

Source: Estimates based on reports from the Ministry of National Education

This data underscores severe infrastructural weaknesses compromising the learning environment, student and teacher well-being, and the integration of modern educational technologies.

3.4 Socioeconomic Factors Causing Dropout

Table 6: Causes of School Dropout by Category (2023 Field Study)

Major Cause	Percentage (%)	Most Affected Group
Economic Reasons	**38%**	Males, rural, poor
Social Reasons	**28%**	Females, conservative areas
Educational Reasons	**18%**	Academically delayed students

Source: National Study on Dropout

Economic hardship is the leading cause, particularly among rural boys, demanding financial support and incentives to encourage school attendance. Social-cultural barriers predominantly affect girls in conservative regions, necessitating gender-sensitive policies. Educational challenges require targeted support for struggling learners

4. Discussion

The data indicate that primary education in Algeria faces structural and fundamental challenges that affect learning quality and the achievement of human development goals. Despite high enrollment and apparent success rates, weak literacy and numeracy skills confirm the existence of a significant educational gap requiring urgent and comprehensive intervention.

Classroom overcrowding is one of the most prominent obstacles, as overcrowded classes reduce teachers' ability to provide individualized support and hinder the implementation of active learning strategies that foster critical thinking and creativity. The uneven distribution of students and teachers between urban and rural areas further exacerbates these challenges.

Deteriorated infrastructure creates an unsuitable learning environment, with inadequate sanitary and technological services negatively impacting the motivation of both students and teachers.

Socioeconomic factors represent external elements influencing educational continuity, especially among vulnerable groups, making financial and social support essential.

Finally, the lack of ongoing professional training for teachers remains a major barrier to improving education quality. Continuous and targeted teacher development is a cornerstone for advancing the educational process.

Based on these findings, it is imperative to adopt a comprehensive and integrated strategy that considers educational, social, economic, and infrastructural dimensions to ensure effective and equitable primary education.

5. Recommendations

1. Continue supporting educational infrastructure, ensuring adequate resources and improving teachers' skills.
2. Implement a comprehensive strategy that includes curriculum updating, reducing overcrowding, providing educational resources, combating dropout, and enhancing teacher training and qualification. These combined efforts will help raise academic achievement and produce better educational outcomes benefiting children and society.
3. Focus on developing support for classrooms in remote areas and reducing overcrowding in large

classes to ensure a more effective and inclusive learning environment.

4. Adopt integrated solutions combining economic support, social change, and educational development to keep as many children as possible in school and achieve inclusive and equitable education.

Conclusion

The study concludes that primary education in Algeria is at a critical juncture requiring fundamental and comprehensive reforms, as the educational system faces structural challenges that impact learning quality and student achievement. Despite quantitative progress in enrollment and success rates, qualitative challenges such as overcrowding, weak infrastructure, lack of educational resources, and gaps in teacher professional development undermine the effectiveness of the educational process.

The study emphasizes that addressing these challenges necessitates adopting an integrated strategy focused on curriculum modernization, reducing class density, improving infrastructure, and strengthening teacher training and qualification. Additionally, implementing social and economic support policies is essential to reduce dropout rates, especially in impoverished and remote areas.

Achieving these reforms will open new horizons for a higher-quality and more effective primary education capable of preparing a generation of independent and creative learners who contribute to sustainable national development. Therefore, investing in improving primary education is an investment in Algeria's future and prosperity.

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