# Managerial Analysis of the Overcrowding Schools Situation in Algeria

Kadri Nabila<sup>1</sup> & Souad Sassi Boudemagh<sup>1</sup>

<sup>1</sup> University Constantine 3 Laboratory AVMF, Constantine, Algeria

Correspondence: Kadri Nabila, University Constantine 3 Laboratory AVMF, Constantine, Algeria.

Received: March 20, 2022	Accepted: May 5, 2022	Online Published: May 23, 2022
doi:10.5539/jms.v12n1p152	URL: https://doi.org/10.5539/jms.v12n1p152	

# Abstract

To provide quality education, the education sector in Algeria has undergone several transformations and significant changes since its independence. The current paper aims to explain the current, problematic situation and analyze it through adapting a qualitative approach. The analysis is based on the process of planning and programming of public schools in Algeria, taking as a case study the public primary school of the new city, Ali Mendjeli, in Constantine. The data for this study were collected using a semistructured face-to-face questionnaire, an interview, and a discourse analysis applied to the press documents. The data gathered from the questionnaires were processed using Statistical Package for the Social Sciences (SPSS) software. The results revealed that the main factors of schools overcrowding in Algeria exist at various levels: strategic, tactical, and operational.

Keywords: qualitative approach, quality education, planning, programming, schools overcrowding

# 1. Introduction

Like many countries, Algeria considers education to be the foundation of development of all fields. After independence and following the law of free and compulsory education, Algeria made huge investments in education and has undergone several reforms to guarantee equitable access to schooling, according to a report published by the United Nations International Children's Emergency Fund. These reforms were reflected in development plans to construct a large number of school infrastructures and to fill the considerable deficit in the schools building stock. After the 2003 reform, two consecutive five-year development plans were implemented. The 2005–2009 plans permitted the completion of 1,200 elementary schools, 861 middle schools, and 301 high schools. The 2010–2014 plan provided for the completion of 3,000 elementary schools, 1,000 middle schools, and 850 high schools (Nakib, 2015). By the start of the 2015–2016 school year, the school building stock in Algeria was estimated by the Ministry of Education at 18,588 elementary schools, 5,339 middle schools, and 2,252 high schools, spread across the country.

However, despite the considerable progress in terms of quantity, the Algerian education sector occupies the front page of the written press, polarizing the debates on the various media due to numerous problems. The most significant problem Algerian education is facing is school overcrowding. According to the Ministry of National Education, 3,127 elementary schools and 1,023 colleges experienced overcrowded classes in 2018 (about 50 students per class or three students per table). This has been the reality experienced in Algerian schools for decades, despite the effort to increase the number of educational institutions.

The problem of school overcrowding is strongly reflected in the new city, Ali Mendjeli. The town has experienced several successive attempts to rehouse the population. Hence, children of the rehoused families are put in overcrowded classrooms, and others are directed to establishments far from their homes (four or five kilometers away) in the absence of school transport. Consequently, this situation has generated many problems for students, teachers, the teaching process, and pedagogical activities. It has put pressure on school facilities, which are crucial for effective teaching and learning. The objective of the current research is to highlight the factors responsible for the overcrowding in public elementary schools in Algeria.

# 2. Theoretical Context

The education sector is the most crucial aspect in the development of society. Its complexity arises from its production and the difficulty of managing it, whether in the planning, programming, or implementation phase.

The school is an essential component in the definition of a decent living environment and as a place of learning and

sharing of knowledge and values. According to the recommendations of the United Nations Educational, Scientific and Cultural Organization, the teacher/student ratio should be 1:25 to ensure quality education for everyone. Many public schools in the world suffer from overcrowding. This confirms that the quality of education that students receive is not consistent with international standards. School overcrowding has been discussed by many education policy researchers and decision makers, but it has not received the same attention as other education topics such as education quality, attainment, early childhood education, and the effects on the teacher, performance, and students.

Moreover, the literature on the subject reveals that class size is related to the issue of overcrowding. The problem has been studied in depth by the experimental Tennessee STAR study, whose results suggest that the effects of class size persist for at least five years and remain influential enough to be essential for educational policy. Thus, having small classes in the early years appears to have lasting benefits (Nye et al., 1999).

## 2.1 Overcrowded Classrooms

A school is overcrowded when the number of students enrolled in the school is greater than the number of students the school is designed to accommodate. An overcrowded classroom is a classroom where the student/teacher ratio exceeds the recommendation of a given country's education policy. In developed countries, having over 20 to 30 students per teacher is considered overcrowding. However, in developing countries, it is considered normal. Even if students are provided with extensive information and useful life experiences (Shah & Inamullah, 2012), noisy environments lead to poor listening. They affect the reading ability and the instruction of teachers versus a quieter environment that ensures good listening (Shah & Inamullah, 2012).

## 2.2 The Causes of Class Overcrowding

School overcrowding has become a universal dilemma, with differential rates and causes in different countries. In California, the reasons for public school overcrowding are the transfer of responsibility for new school construction from state to local governments. Although the state has increased funding for such construction, the funding available to localities is inadequate with the state's enormous growth in numbers, rapid increase in the school-age population, and reduction in classroom size (Ready et al., 2004).

In South Africa, the reasons associated with overcrowded classrooms are the lack of school infrastructure and the inequality that persists in the education system. The lack of infrastructure is attributed to two reasons: the politicization of education through the union leaders who play politicians when they engage in departments, and the total lack of accountability in the overall education system (Masemola, 2010). Researchers have argued that overcrowded classes are due to the lack of school infrastructure. Additionally, the basic institutions of education take too long to build schools or repair damaged ones. Furthermore, the shortage of teachers and principals who seek to increase the enrolment of their schools to improve their salaries is also a factor that leads to overcrowded classes. In Pakistan, public schools are overcrowded because of population growth, resource limitations, and budget constraints (Khan & Iqbal, 2012). Similarly, large classes in Nigeria are associated with the government's policy that favors free and compulsory basic education (Asodike & Onyeike, 2016).

The review of the related literature identified a set of universal factors responsible for school overcrowding. The main causes of school overcrowding are linked to budgetary problems, as the budgets allocated by the state remain below the needs of the population. Political problems and government strategies are also among the reasons for school overloading. As noted, malfunctions in the budget or realization of school infrastructure and rapid increases in the school-age population can have a major effect on school overcrowding.

## 2.3 The Effects of Overcrowding Classes

According to several researchers, school overcrowding negatively influences the education system in all its aspects and components. Scholars agree that overcrowded schools can negatively affect two essential and intertwined factors: teaching time and classroom management (Ehrenberg et al., 2001; Wilson, 2006). Large classes impair the teacher's ability to manage time, requiring more time to devote to instruction, tasks, and behavior management, leaving less time for instruction.

In addition to the fact that overcrowding affects the teacher, the learner, and academic performance, it also contributes to other significant problems, such as school violence, the spread of contagious diseases, school wastage, and inadequate school facilities. Overcrowding highlights a series of interrelated problems that could damage the education system and spoil all the efforts made by the state in this sector. Hence, it is an obstacle to achieving the goal of quality education.

## 3. Research Questions

School overcrowding has been linked to decreases in the quality of teaching and learning and can lead to undesired

effects on the achievement of educational goals. Despite the efforts made by the Algerian education sector to overcome school overcrowding, Algerian schools still suffer from overcrowding, hindering the process of providing quality teaching/learning.

In this context, this paper aims to address the following question:

What are the main factors behind school overcrowding in the new city, Ali Mendjeli?

The current article attempts to analyze the situation of school overcrowding in this city to identify the gap.

## 4. Method

## 4.1 Context of the Study

The new city, Ali Mendjeli, is a recently built town. Its creation was determined by a policy of development and urban planning at the regional level. Created within the framework of the urban development masterplan of the Constantine Group, it was approved by Interministerial Decree N° 16 of 28/01/1988. Its creation was confirmed within the framework of the masterplan for urban development and planning of the Constantine Group, and it was approved by Executive Decree N° 98/83 of 25/02/1998.

The new Ali Mendjeli city is destined to decongest the city of Constantine in terms of housing and facilities. It was initially established with an area of 1,500 ha. However, with the new extensions (west and south), it has spread over 2,178 ha. The city is intended to accommodate 300,000 inhabitants.

Ali Mendjeli has witnessed an important population transfer, coming mostly from the slum areas and neighborhoods of the old city or neighborhoods affected by landslides since the 90s. Despite the planned program of realization of new schools in this city (20 school groups in the five-year program 2010–2014), its public schools are still suffering from overcrowding issues.

## 4.2 Data Collection Methods

A qualitative approach was adopted in this study. The data collection methods included a face-to-face semi-directive questionnaire and an interview. Additionally, a discourse analysis was conducted on a corpus of all written discourse in newspapers (declarations of the Minister of National Education, and defers from the actors of the educational sector). SPSS software version 21 was used to process the questionnaires. Data analyses enable a clear display of the gathered data and a more readable presentation of the results relating to school overcrowding problems in Algeria, specifically in the new city, Ali Mendjeli.

## 4.3 Selection of Interviewees

The Executive Decree No. 90–174 of June 9, 1990, established the organization and functioning of the education services at the state level. The Directorate of Education is responsible for the management of activities and pedagogical tasks in educational establishments under this sector. Such activities include the development of schools, updating of the school map, and the evaluation of the educational needs of the state.

On this basis, staff from the Directorate of Education of the State of Constantine have been interviewed. Five employees from the following department were selected: the Programming and Monitoring Department, the Statistics Department, and the Educational Organization Department. Only 14 employees participated in the study, as one office manager did not participate due to a heavy workload. The participants were asked about the causes of overcrowding in public elementary schools in Ali Mendjeli in Constantine, Algeria.

## 5. Results and Discussion

## 5.1 Situation of the Problem

After analyzing the documents provided by the statistical service of the Directorate of Education, it has been concluded that 75% of the public elementary schools in Ali Mendjeli are affected by school overcrowding. The number of students per class exceeds 50 students in several schools and does not exceed 10 students in some others (e.g., Neighborhood Unit 20, the western extension).

School overcrowding reaches its peak in the following areas: neighborhood Unit 20, 14, and, 12, the western extension. It can be understood that this is due to the number of people relocated to these areas and the delay in building schools accompanying the new housing.

# 5.2 Causes of Schools Overcrowding

# 5.2.1 Factors Related to Planning

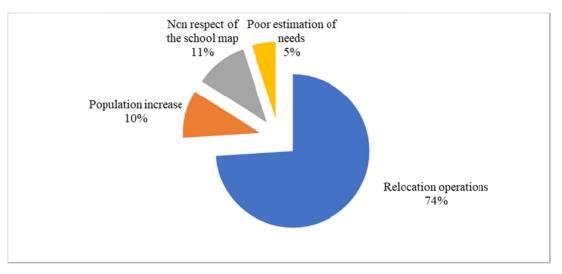


Figure 1. Factors related to planning

Figure 2 demonstrates that the factors causing school overcrowding in the public elementary schools of Ali Mendjeli are the result of poor school planning. It is clear that the main factor is the relocation of the population in a hierarchical and uncoordinated manner, with a percentage of 74%. This led to an unexpected increase in the school-age population, which created intense pressure on existing schools. Other secondary factors include the increase in the population (10%), failure to respect the school map (11%), and the poor estimation of needs (5%).

5.2.2 Factors Related to Programming

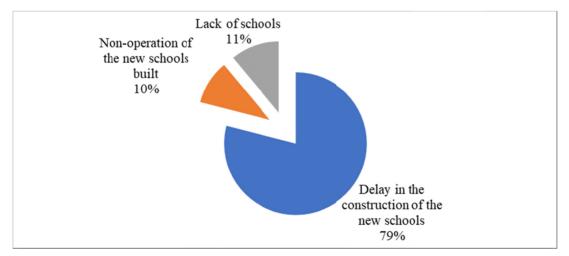


Figure 2. Factors related to programming

The data reported in Figure 2 present the causes of the overcrowding of public elementary schools in Ali Mendjeli. These factors are related to the mismanagement of programming new schools and using existing ones. The primary cause is the delay in the construction of new schools, with a percentage of 79%. Additionally, the lack of schools that make up (10%) and the schools built but not put into operation because of a lack of pedagogical supervision and school facilities (11%) have contributed significantly to school overcrowding.

All the participants in the survey confirmed the problem of public elementary school overcrowding has existed

since the creation of Ali Mendjeli, and especially after the relocation to this city. This problem is also growing distinctively over time. The teacher/pupil ratio varies between 54 and 10, which shows a clear imbalance in the school map.

According to a statement from an official in the Directorate of Education Department: "we don't get precise information. They just inform us when there is a rehousing without specifying the number of children enrolled. We need a detailed balance sheet of children enrolled to be able to manage the school transformations from one school to another before the start of the school year." It was concluded there was a lack of coordination between the Directorate of Education and the department responsible for rehousing the city operations.

Despite the efforts of the state to enhance the education sector through large budgets allocated for the construction of new schools, the lag in the planning and programming process and the lack of communication between stakeholders has led to a creation of the problem. School construction operations have been delayed, and rehousing operations are poorly managed, which affects the balance of the school map and leads to overcrowding in schools.

A study was conducted through a managerial analysis to detect anomalies in the realization of public elementary schools of the five-year program from 2010–2014 in Constantine. Using the Delphi method, the results of this study revealed that the majority of elementary schools projects were failing. The study identified 14 factors of failure. The most influential factor is the delay in all phases of the project (study and realization), the overspending of the initial budget, and the poor communication between the stakeholders (Terrai, 2016).

#### 6. Conclusion

Although Algeria, after independence, has set enhancing its education sector as a priority and devoted heavy investment to the construction of a considerable number of schools to fill the deficit in the school building stock, the problem has not yet been solved.

This study has analyzed the classroom overcrowding in Algeria through the case of public elementary schools in the new city, Ali Mendjeli. The results of the study have revealed that school overcrowding is caused by two dominant factors related to planning and programming. These factors are reflected to the delay in the construction of schools and the poor management of the successive relocation operations that the city has experienced for several years. Additionally, the poor communication and coordination between the stakeholders and policy makers has deepened the gap.

The current study recommends that school construction planning should be launched in parallel with housing construction; stakeholders responsible for school construction must ensure new schools are not delayed in their completion. This requires ongoing communication with stakeholders and policymakers to understand their needs and expectations resolve problems as they arise, manage conflicts of interest, and foster the appropriate participation of stakeholders in project decisions.

The education sector is everyone's responsibility. The ministry of education, the education departments, the people in charge of implementing state programs, parents and their associations, teachers and their unions, and students have a responsibility and interest in fostering quality education. Communication is essential to ensure good collaboration among stakeholders. This communication is part of the planning and programming. It is the key to meeting students' needs and better achieving governmental objectives.

## Acknowledgments

Special thanks to the DGRSDT (Algerian Ministry of Higher Education and Scientific Research) for its unconditional support and help.

## References

- Asodike, J. D., & Onyeike, V. C. (2016). Managing large classes in developing countries. Global Journal of Educational Research, 15(1), 31–39. https://doi.org/10.4314/gjedr.v15i1.4
- Ehrenberg, R. G., Brewer, D. J., Gamoran, A., & Willms, J. D. (2001). Class size and student achievement. *Psychological Science in the Public Interest*, 2(1), 1–30. https://doi.org/10.1111/1529-1006.003
- Khan, P., & Iqbal, M. (2012). Overcrowded classroom: A serious problem for teachers. *University of Science and Information Technology*, 49, 10162–10165.
- Masemola, L. (2010). Lack of classrooms puts kids under pressure. IOL. Retrieved from https://www.iol.co.za/?fbclid=IwAR0beJFKy1IvkKWhrk2v3Rp36IVDkTJxJbK9kiwD8GEHOOBvMrNnG Z3QIn4

- Nakib, F. (2015). Flexible and adaptable school places conceptual models for public elementary school in *Algeria*. Unpublished doctoral dissertation, Polytechnic School of Architecture and Urbanism of Algiers, Algeria.
- Nye, B., Hedges, L. V., & Konstantopoulos, S. (1999). The long-term effects of small classes: A five-year follow-up of the Tennessee class size experiment. *Educational Evaluation and Policy Analysis*, 21(2), 127–142. https://doi.org/10.3102/01623737021002127.
- Ready, D., Lee, V., & Welner, K. G. (2004). Educational equity and school structure: School size, overcrowding, and schools-within-schools. *Teachers College Record*, 106(10), 1989–2014 https://doi.org/10.1177/016146810410601005
- Shah, J., & Inamullah, M. (2012). The impact of overcrowded classroom on the academic performance of the students at secondary level. *International Journal of Research in Commerce, Economics and Management*, 2(6), 141–153.
- Terrai, S. (2016). *The factors of failure of school constructions through the eyes of experts*. Unpublished master's thesis. Salah Boubnider University, Constantine, Algeria.
- Wilson, V. (2006). Does small really make a difference? An update: A review of the literature on the effects of class size on teaching practice and pupils' behaviour and attainment (vol. 123). The Scottish Council for Research in Education.

## Copyrights

Copyright for this article is retained by the author, with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).