

Research Article

Evolution of the School Building Network in Portugal in the First Decade of the New Millennium

Evolución de la Red de Edificios Escolares en Portugal en la Primera Década del Nuevo Milenio

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Abstract

Introduction: The network of non-higher education has evolved in a very peculiar way over the decades in Portugal. The 21st century has been marked by the growth of competitive logic, which also affects the education sector. Even so, this evolution is reflected in different ways in each contexts. **Methodology:** The research adopted a descriptive quantitative approach, based on statistical data, focused on two regions of Portugal – Coimbra Region and Lisbon Metropolitan Area –, allowing a comparassion from 1999/2000 to 2009/2010. **Results:** The evolution of non-higher education establishments varies greatly between the two regions under study, although in the country as a whole, private provision has increased and public and total provision has decreased. **Discussion:** The study provides an interesting and objective analysis of the issue, that should considere a set of considerations, including the evolution of arts and specialized education and vocational education – which were particularly relevant during the period under study – and the emergence of new elements that reinforce the logic of competitiveness in schools, such as the rankings implemented in Portugal since 2001. **Conclusions:** The different needs of the education system reflect a varied evolution, highlighting territorial asymmetries in the country under study.

Keywords: School Network; Privatization; Schools; School Choice; School Buildings; Educational Offer; Social inequalities; School Offer.

Resumen

Introducción: La red de educación no superior ha evolucionado de una manera muy peculiar a lo largo de las últimas décadas en Portugal. El siglo XXI se ha caracterizado por el crecimiento de la lógica competitiva, que también afecta al sector educativo. Aun así, esta evolución se refleja de diferentes maneras en cada contexto. **Metodología:** La investigación adoptó un enfoque cuantitativo descriptivo, basado en datos estadísticos, centrado en dos regiones de Portugal –la región de Coimbra y el área metropolitana de Lisboa–, lo que permitió realizar una comparación entre 1999/2000 y 2009/2010. **Resultados:** La evolución de los centros de educación no superior varía mucho entre las dos regiones estudiadas, aunque en el conjunto del país ha aumentado la oferta privada y ha disminuido la oferta pública y total. **Discusión:** El estudio ofrece un análisis interesante y objetivo de la cuestión, que debe tener en cuenta una serie de consideraciones, entre ellas la evolución de la educación artística y especializada y la formación profesional –que fueron especialmente relevantes durante el período estudiado– y la aparición de nuevos elementos que refuerzan la lógica de la competitividad en las escuelas, como las clasificaciones implantadas en Portugal desde 2001. **Conclusiones:** Las diferentes necesidades del sistema educativo reflejan una evolución variada, que pone de relieve las asimetrías territoriales en el país objeto de estudio.

Palabras clave: Red escolar; Privatización; Escuelas; Elección de escuela; Edificios escolares; Oferta educativa; Desigualdades sociales; Oferta escolar.

1. Introduction

School education has evolved throughout history, at the curricular, temporal, infrastructural, and administrative levels. This development of school education is driven largely by public policies, such as the definition of compulsory schooling, and by the population's need to develop skills, not only for learning disciplinary knowledge, but also for socialization and, with particular emphasis in recent decades, to meet the needs of the labor market.

Regardless of the causes, there is a significant increase in the number of children and young people in formal education in Portugal. This increase, in addition to being quantifiable, creates needs that are reflected in changes in educational resources, such as buildings and school supplies. Furthermore, schools have a significant influence on community life, with more professionals involved in education – teachers, assistant technicians, and operational staff, among others – in addition to the students themselves.

The evolution of the school network in Portugal, particularly the types of its provision – public or private – has evolved significantly over the past fifty years. This study focuses on the evolution of provision throughout the first decade of the 2000 millennium.

As Lubienski (2006) explains, the term “privatization” is not easy to conceptualize in education, but tells several integrations of private logic in the education sector, such as “the use of market mechanisms, market models, private ownership, private provision, profit incentives, and other such policies” (p. 2, 2006).

The author emphasizes, however, that “this form of market expansion transforms the way people perceive those goods, as well as how they interact with each other around those goods” (Lubienski, p. 16, 2006). This phenomenon can lead to the introduction of the consumer model, which may lead to the privatization of the purpose of a public good such as education by reconfiguring it as a commodity.

In terms of private school provision in Portugal, variations have been observed over time. These variations parallel those of public schools, and both result in changes in the overall provision. However, some regions contribute more than others to a generalized increase in private provision. Factors such as parents' financial capacity, but also more pronounced gaps in certain parts of the country, may explain these asymmetries.

The academic interest in the demand for education in public and private school systems is not new. In the United States, Stiglitz (1974), Hoxby (1994) and Lubienski et al. (2013) are examples of studies about this matter, just as Teese (1986) studied precisely the evolution of private schools in France.

The relevance of this study resides in the comparison of two cases and allows us to raise questions regarding access to schooling, plurality of choice, and also possible territorial inequalities. This phenomenon – the growth of private schools programs – concerns several authors, between racial, economic, democratic and other issues, summarized by Egalite & Wolf (2016), but can also constitute opportunities for education systems.

This study contributes to the literature on the history and sociology of education and public policy, as it relies on the systematization of three critical axes:

- a) Evolution at “Two Speeds”, as the research demonstrates the contrast between the contraction of the public network in the interior and center of the country (Coimbra Region), motivated by policies of rationalization and closure of schools in rural areas, and the maintenance or expansion of supply in large urban centers, where the infrastructure resists due to population density;
- b) Interregulation in the Lisbon Metropolitan Area, as the study shows the parity achieved in the Lisbon Metropolitan Area, where the private supply reached 47.3% compared to 52.7% of the public supply in 2009/2010. This reality is not merely numerical – it goes from a logic of competitiveness and market that exposes the vulnerability of the public supply in the largest metropolitan region of the country;
- c) Asymmetries in Specialized Education and Equity: the originality of the study also lies in the analysis of the network of artistic and vocational education, as it demonstrates that artistic education remains “modest” and perversely concentrated in the biggest cities (Lisbon and Porto), leaving the interior uncovered.

We highlight the fact that particular schools can be more than a offer for the families with more income. It can also be an instrument to combat the inequalities, as in Colombia the concessions schools – partnership between the public and private sectores, with private schools providing public education – are located in areas ranking at the lowest tail of the income distribution (Barrera-Osoario, 2016).

This study opens the way for discussions about territorial asymmetries and the quality of school education in Portugal, as it shows how different the evolution of the school network can be within the same country, especially during a period that is important for the qualification and social development of the population. Without engaging the private *vs* public education debate, we explore evidence and relevant contrasts to a national reality, which is not immune to Western trends and rhetoric.

1.1. Evolution of schooling in Portugal

For contextual reference, the Base Law of the Education System dates back to 1986 (Law No. 46/86 of October 14) – which coincides with the year Portugal joined the European Union, then the European Economic Community (EEC) – and established compulsory schooling until the 9th grade (corresponding to age 15). In 2009, Law No. 85/2009 of August 27 extended compulsory schooling to the 12th grade (up to age 18).

Portugal was one of the European countries with a high illiteracy rate during the 20th century. For part of the 20th century, many Portuguese did not learn to read and write, with some of those who learned doing so outside of school (Candeias et al., 1999) and for utilitarian purposes, as tools. Non-institutional education was a priority for many families, as they favoured education geared towards economics activities (Candeias et al., 1999). For these and other reasons, the implementation of the education system was slow in Portugal.

The progress made at the end of the last century was significant, and this also entailed demands on schools, which now have more students and for longer periods. Compulsory school attendance is one of the most effective educational policy instruments for ensuring universal school education, and its establishment was the result of significant sociopolitical convergences (Verdasca, 2017).

1.1.1. The evolution of non-higher education levels between 1999/2000 and 2009/2010

The major expansion of non-higher education in Portugal began in the late 1970s. This progress was evident at various levels of education and, although gradually, continued to evolve during 1999/2000 and 2009/2010. The extension of compulsory education to the 12th year (secondary education) in 2009 enabled, from that moment onwards, an even more notable increase in secondary education enrolment, which had not yet been so evident in 2009/2010, despite the notable progress relative to 1999/2000 (table 1).

This period is notable for the 100% enrollment rate in all school years, at the primary level, a strong commitment in Portugal for decades to combat illiteracy. Among the developments over these ten years, a 16.1% increase in the enrollment rate in preschool education is noteworthy, demonstrating a growing concern from the Portuguese State and families regarding preschool education.

The growth in the enrollment rate at all levels of non-higher education is accompanied by increases at various levels, in particular, resulting from educational policies implemented over the years, particularly effective due to the extension of compulsory education.

Table 1.

Evolution of schooling in Portugal by level of non-higher education (1999/2000 – 2009/2010)

Education Level	1999/2000	2009/2010	Diference 1999/2000 – 2009/2010 (%)
Preschool education	69,5%	85,6%	+16,1%
Basic Education (1 st cycle)	100%	100%	0%
Basic Education (2 nd cycle)	86,7%	91,6%	+4,9%
Basic Education (3 rd cycle)	83,4%	87,4%	+4%
Secondary Education	58,7%	69,6%	+10,9%
Average	79,7%	86,8%	+7,1%

Source: Prepared by the author (2025), based on Edustat <https://acortar.link/sWQSDR>

Quaresma (2015) describes a widespread view of school education, which associates public (state) schools with weak educational conditions and lower-quality teaching. This thinking tends to lead to the idea that private schools are a way to bridge this gap. For a long time, this was the priority of the population elite, but from the 1980s onward, it became a priority for all families (Quaresma, 2015).

Another issue contributing to the importance of private schools are public-private agreements – or "association contracts" – established between the State and private schools, which began to be signed in the 1980s to meet the needs of areas of the country where state provision was found insufficient.

The evident increase in the school population brought challenges for the education system, which varied across the country. It's no surprise that the most schools are located in Lisbon, a situation that was already present in the middle of the last century (Santa-Clara, 2014). This trend was exacerbated by the overall increase in student numbers.

1.1.2. Government spending on education as a share of GDP

The percentage of Portugal's Gross Domestic Product (GDP) invested in education has varied over time, and the effects of a given investment can be felt in subsequent years. To understand how Portugal prepared for the increase in its population's schooling, we must go back in time. In 1974, GDP investment in education was 1,9%, in 1989 it was 3,5%, and in 2009, 5,6% (table 2).

Despite this increase, which has been relatively continuous since 1974 – with some variation – the most significant increase in investment occurred after 1986 – the year of Portugal's entry into the EEC (EU) – and reflects the country's need to achieve European goals. The year 1986 was, in general, a turning point at a political and social level, with the already described process of accession to the European Union, as there was a strong perception of the need to introduce profound and systematic changes in the Portuguese education system, as a way of combating "backwardness" and promoting the "modernization" of the country (Canário, 2006).

Table 2.

Government spending on education as a share of GDP

Year	GDP % on education	Variation compared to five years
1974	1,9%	-
1979	2,7%	+0,8%
1984	3,1%	+0,4%
1989	3,5%	+0,4%
1994	4,7%	+1,2%
1999	5%	+0,3%
2004	5%	0%
2009	5,6%	+0,6%
Total variation (%)		+3,7%

Source: Prepared by the author (2025), based on OurWorldinData <https://acortar.link/bWLDK8>

1.1.3. A brief note about private school provision in Portugal

According to the Association of Private and Cooperative Education Establishments (AEEP), until April 25, 1974, private school owners were required to be members of the National Guild of Private Education Establishment Owners. In June 1974, AEEP was created. Private education already existed before the democratic transition. In this study, we explore the evolution of the general provision, and of public and private provision in particular, in school education in Portugal.

As already mentioned, the State has, at various times in Portugal's recent history, used private and cooperative education establishments, through association contracts – concessions, as in Colombia (Barrera-Osoario, 2016) –, to fill gaps identified in the public provision. Despite this, public schools are the cornerstone of education in post-dictatorship Portugal and were seen by the State as a necessary commitment to equal opportunities throughout the country.

Therefore, it is safe to say that private schools operate on their own initiative, as alternatives to the state offer, or were requested by the State to fill gaps in the public offer. In Portugal, it is important to highlight the importance of private schools in artistic, specialised and even professional education, as we tell in the discussion.

1.2. Demographic characterization of contexts

Non-Higher Education in Portugal comprises preschool (from age 3 until entry into primary school), basic education (from ages 6 to 15) – 1st cycle, 2nd cycle, and 3rd cycle – and secondary education (from ages 15 to 18). The inclusion of daycare centers in the education system is a current discussion, excluding this level of education from the study.

According to Pordata, in 1999, the total resident population in Portugal was 10 249 022 inhabitants. The same data indicate that by 2009, the total population of Portugal had grown to 10 573 479.

The school-age population, considered in this study to be between ages 0 and 19 for statistical purposes, fluctuated between the various age groups, which is worth noting (Table 3).

Table 3.

School-age population (up to 18 years old)

Age Group (in years)	1999	2009	Difference
<5	550 097	513 441	-36 656
5-9	558 284	549 205	-9 079
10-14	582 885	555 377	-27 508
15-19	704 649	574 258	-13 0391
Total	2 395 915	2 192 281	-203 634

Source: Prepared by the author (2025), based on Pordata <https://acortar.link/K3y3Ro>

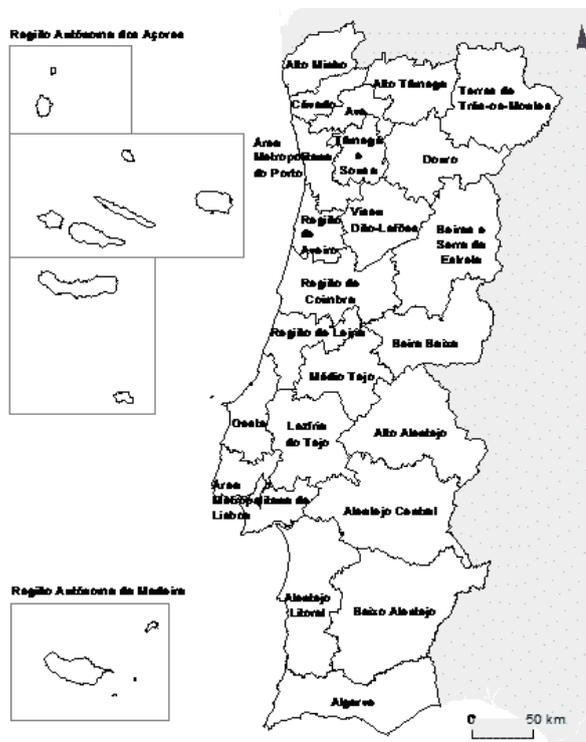
Among the fluctuations, the loss of over 200 000 school-age children in just a decade stands out. The biggest difference lies in the population aged 15 to 19, corresponding to secondary education.

Based on the data, there was a significant overall decline in the school-age population, around 8,5%. Looking at the overall population data, we see the opposite effect, with a 3,2% increase in residents in Portugal.

The contexts studied correspond to two regions of Portugal, one in the center of the country – the Coimbra Region – and the other in the south – the LMA – allowing for a comparison between two distinct territories (Figure 1).

Figure 1.

Portugal Map (NUTS III)



Source: Portuguese National Statistics Institute (INE).

To better understand the regions under study, we explored data from the 2001 and 2011 Censuses, applied to the districts of Coimbra and Lisbon, which are as close as possible – both temporally and in terms of population – to the contexts under analysis.

In the case of the District of Coimbra, in 2001, there were 441,204 residents. In the following censuses, in 2011, there were 430,104 residents. During this period, there was a 0,2% increase in the District's population.

In the District of Lisbon, the 2001 Census recorded 2 136 013 residents. Ten years later, 2 250 533 inhabitants were registered in the same District, corresponding to a 5,1% increase in the resident population.

Returning to NUTS III, these are clearly two distinct territories. Portugal covers 92 225 km², of which 3,3% corresponds to the LMA (3,015 km²). The Coimbra Region occupies 4,7% of the national area, with 4 336 km². The Coimbra Region includes 19 municipalities, while the LMA includes 18 municipalities.

The Coimbra Region is larger in terms of territory and even has one more municipality than the LMA. However, the NUTS III region, which includes Portugal's capital, has a much higher population density.

2. Methodology

This research was conducted using a descriptive quantitative approach, based on statistical data provided by the Portuguese National Statistics Institute (INE). The extraction and processing of statistical data were carried out and validated in 2025, ensuring the timeliness of the retrospective analysis covering the period between the school years 1999/2000 and 2009/2010. The study is based on the analysis of consolidated historical series, allowing for the observation of structural changes in the school network during the first decade of the 21st century.

It is, therefore, a study of the history of education in the present day, based on a careful analysis of historical data and an experienced understanding of its sequential trajectory.

2.1. Sources and Operationalization of Variables

The investigation is based on the triangulation of official statistical sources, organized according to the variables under analysis:

2.1.1. School Network and Typologies

Data extracted from INE, categorizing Kindergartens, Basic Schools (1st, 2nd and 3rd Cycles), Secondary Schools, Specialized Art Schools and Vocational Schools¹.

2.1.2. Schooling and Educational Success

Data from Edustat, used to relate the impact of the 1986 Basic Education Law and Law No. 85/2009 (which extended compulsory schooling to the 12th grade) with the 10.9% increase in the secondary school enrolment rate.

¹ Methodological note: The same institution is counted as many times as it has educational levels, so the total number of institutions does not correspond to the sum of the number of institutions per educational level. Institutions that offer qualifying courses (education and training courses) are included in the equivalent educational levels. Typologies in accordance with Decree-Law No. 299/2007 of August 22. Includes only educational institutions under the supervision of the Ministry of Education.

2.1.3. Demographic Indicators

Data from Pordata, including total resident population and the school-age population (0–19 years), which allowed the identification of an 8.5% decrease (more than 200,000 individuals) in this age group.

2.1.4. Public Investment in Education

Data from OurWorldinData documenting the evolution of public investment in education as a percentage of GDP (from 1.9% in 1974 to 5.6% in 2009).

2.2. Territorial Context

Two regions of Portugal were selected for analysis: the Coimbra Region, located in the central part of the country, and the Lisbon Metropolitan Area (LMA). The territorial units correspond to the Nomenclature of Territorial Units for Statistics (NUTS), specifically the NUTS III level, using the 2013 classification. In this framework, the Lisbon Metropolitan Area corresponds territorially to a NUTS II region, while the Coimbra Region is integrated within the NUTS II “Centro”.

The selection of the Coimbra Region and the Lisbon Metropolitan Area is justified by their contrasting socio-demographic and territorial characteristics. The Lisbon Metropolitan Area presents significantly higher population density and demographic growth, whereas the Coimbra Region, despite comprising a slightly larger number of municipalities (19 compared with 18 in the LMA), is characterized by greater territorial dispersion and the presence of isolated rural areas. This contrast accentuates the dynamics of school network “contraction through rationalization” observed in low-density territories.

2.3. Statistical Processing and Analysis

Statistical data extracted from the INE platform were processed using Microsoft Excel. The software enabled the normalization of data series and the creation of graphical representations, facilitating the analysis of temporal trends and comparative variations across the period under study.

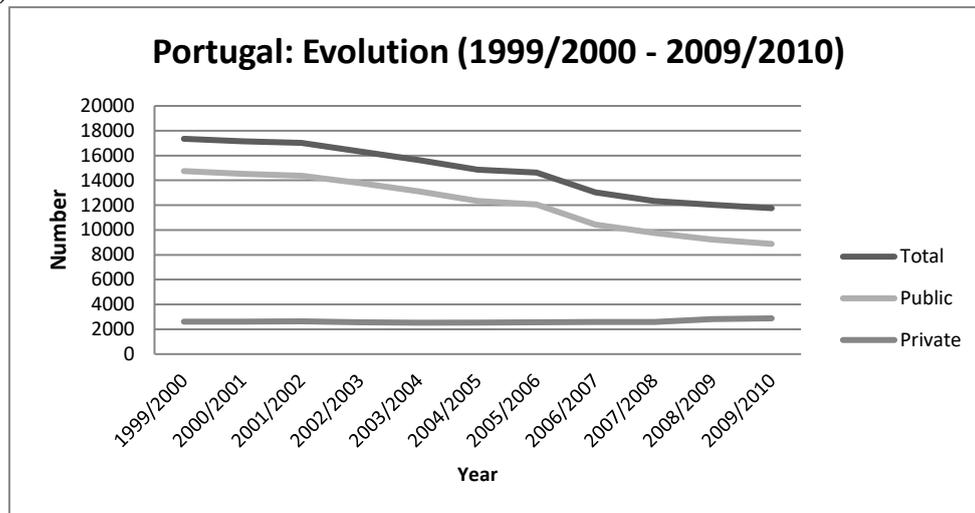
The use of Microsoft Excel software enabled the normalization of complex series and the processing of raw data for the creation of comparative graphical representations. This procedure allowed for the rigorous analysis of variations between 1999/2000 and 2009/2010, ensuring the accuracy of the percentage differentials between public and private supply.

3. Results

In Portugal, between the 1999/2000 and 2009/2010 academic years, the total number of schools decreased by 32,2% (Figure 2). Meanwhile, public schools declined even more sharply during the same period, by 39,8%. Private schools, on the other hand, increased by 9,6%. Despite the decrease in the overall number of non-higher education institutions and the increase in private schools, public schools continued to represent the vast majority of the national offerings (75,5%) in 2009/2010. Ten years earlier, public schools represented 85% of the total offerings.

Figure 2.

Evolution of the supply of Non-Higher Education establishments in Portugal (1999/2000 – 2009/2010)



Source: Prepared by the author (2025), based on INE data.

This trend indicates an increase in the overall private education offering in Portugal. However, it does not, by itself, indicate whether this is a trend across all regions. Therefore, we explored the evolution of the Coimbra Region over the period (Figure 3).

Analyzing the data for the Coimbra Region, we found a 32,5% decrease, very similar to that observed nationwide. However, regarding public education, the decrease was even greater (41.4%) in the Coimbra Region than the overall decrease for the country.

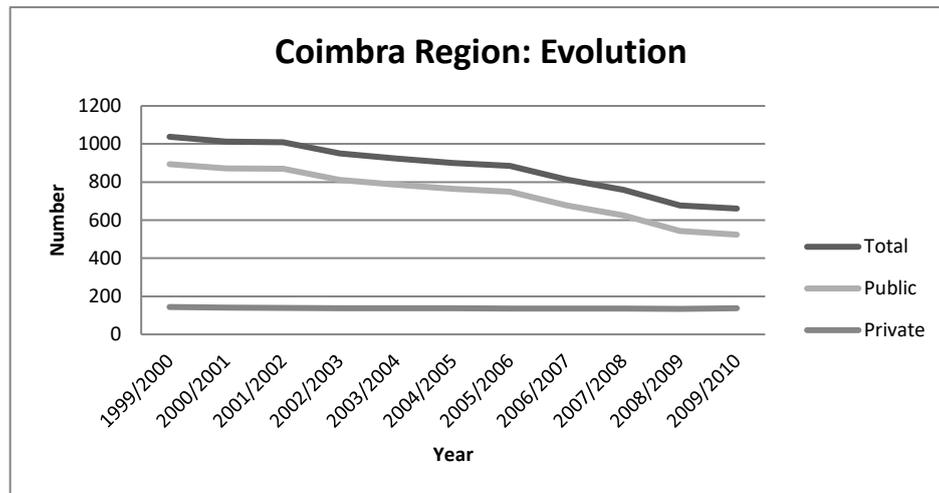
Private education in the Coimbra Region also decreased, contrary to the national trend. However, the decrease was not as pronounced compared to the public education offering, at 4,9%.

We can infer, based on the data presented, that the Coimbra Region lost Non-Higher Education establishments between 1999/2000 and 2009/2010, in line with the national average, but contrary to the national trend of increasing private provision.

In 1999/2000, public offerings in the Coimbra region represented 86,1%. In 2009/2010, public offerings in the same region rose to 79,3%.

Figure 3.

Evolution of the supply of Non-Higher Education establishments in Coimbra Region (1999/2000 – 2009/2010)



Source: Prepared by the author (2025), based on INE data.

The case of the Lisbon Metropolitan Area (LMA) is very different from that of the Coimbra Region. But first, let's analyze each case individually.

The Lisbon Metropolitan Area, during the period studied, also lost non-higher education institutions (Figure 4). However, the overall decrease in supply was 9,1%, well below the national average (32,2%).

In terms of public supply, the decrease in supply is 23%. This figure is much higher than the overall decrease in supply in the LMA (9,1%), although lower than the national average decrease in public supply (39,8%).

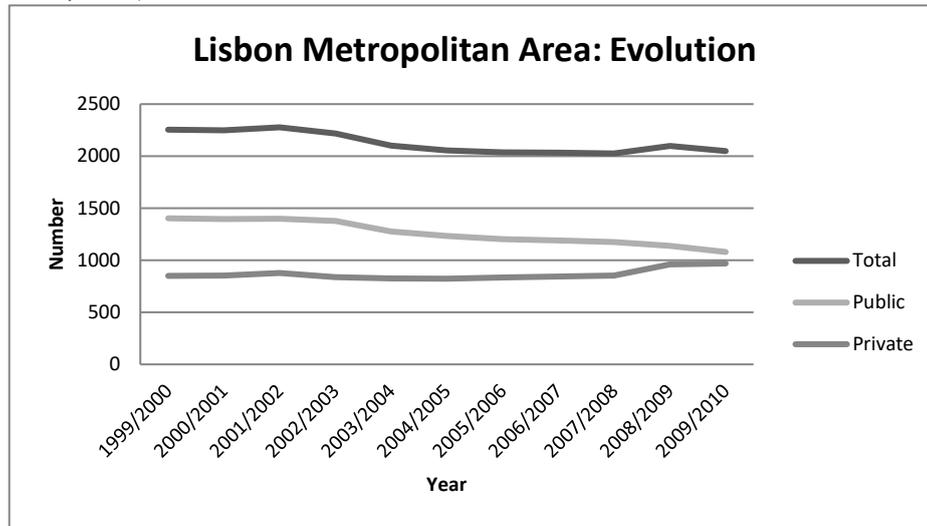
Regarding private supply, the LMA shows a very significant trend, with an increase of 14%. In other words, the LMA experienced, during the period analyzed, an increase 4.4% higher than the national average.

This increase in private supply influenced the characterization of overall supply. In 1999/2000, public provision represented 63,3%, a figure well below the national average (85%). In 2009/2010, the situation was even more specific, with public provision accounting for 52,7%.

This means that in the LMA, private provision, in 2009/2010, represented practically half of the total provision of non-higher education institutions.

Figure 4.

Evolution of the supply of Non-Higher Education establishments in Lisbon Metropolitan Area (1999/2000 – 2009/2010)

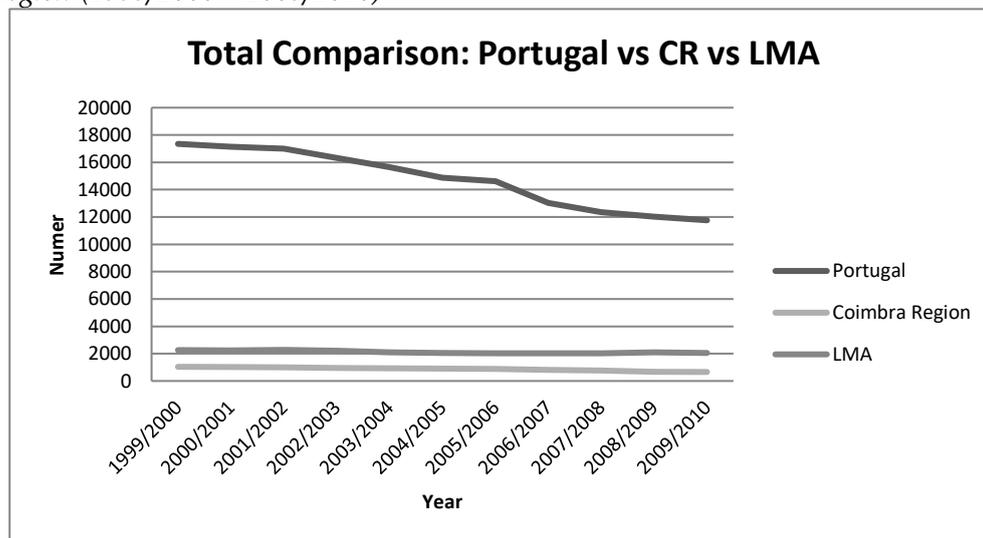


Source: Prepared by the author (2025), based on INE data.

As already noted, the total number of non-higher education institutions in Portugal decreased significantly between 1999/2000 and 2009/2010. However, beyond this change, it is important to understand the relative evolution of the supply in the Coimbra Region and the LMA during the same period (Figure 5).

Figure 5.

Evolution of the total comparison of Non-Higher Education establishments in Portugal, LMA and Coimbra Region (1999/2000 – 2009/2010)

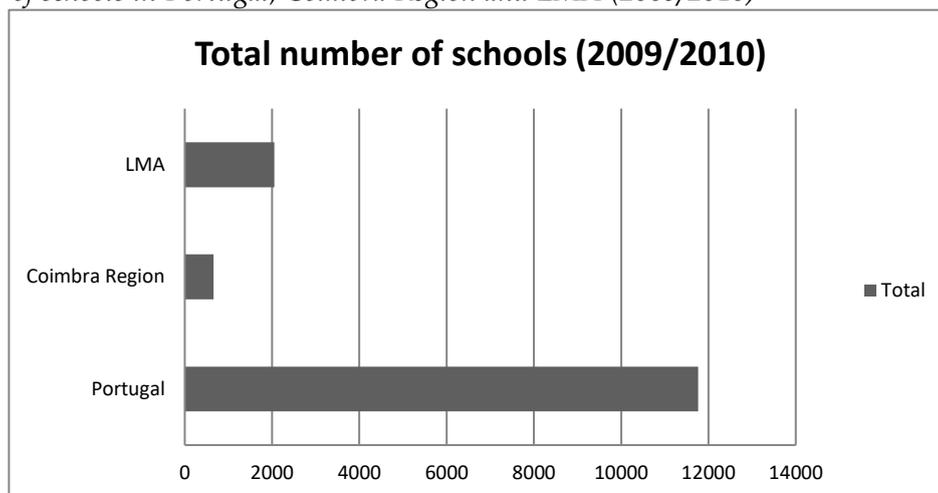


Source: Prepared by the author (2025), based on INE data.

While the Coimbra Region represented approximately 6% of the national supply in 1999/2000, ten years later – 2009/2010 – it represented 5%. On the other hand, the LMA grew in terms of the total national supply, from 13% in 1999/2000 to 17,4% in 2009/2010 (Figure 6).

Figure 6.

Total number of schools in Portugal, Coimbra Region and LMA (2009/2010)



Source: Prepared by the author (2025), based on INE data.

4. Discussion

The evolution observed over the first ten scholar years in Portugal, regarding the network of Non-Higher Education, occurred at different speeds. The examples of the LMA and the Coimbra Region illustrate this disparate evolution. The case of the LMA shows a very significant relative increase in private supply, bringing it locally on par with the public supply existing at the end of the period analyzed.

According to Silva (2022), in Portugal, the awareness that the structure of the primary school network is identified as a predictor of failure only became apparent at the transition from the 20th to the 21st century. According to the author, the elimination of schools in rural areas was, in a way, inevitable.

Considering the territorial dispersion of the Coimbra Region, which is greater than that of the other region compared (LMA), and considering the resident population in both locations, it is easy to understand that the former territory has more rural and even isolated spaces than the latter. The higher population density of the LMA corresponds to a greater demand for schooling, with more children, more professionals and, necessarily, more educational spaces.

When analyzing demographic data, we see that the population growth in the LMA far exceeds the demographic growth of the Coimbra Region, even though, during the decade under analysis, the school-age population actually declined. This fact may explain the decrease in overall offer, but it does not preclude discussion about increasing private offer in the LMA. This fact does not correspond, as we have already observed, to an explicit need for population growth, but rather to other needs.

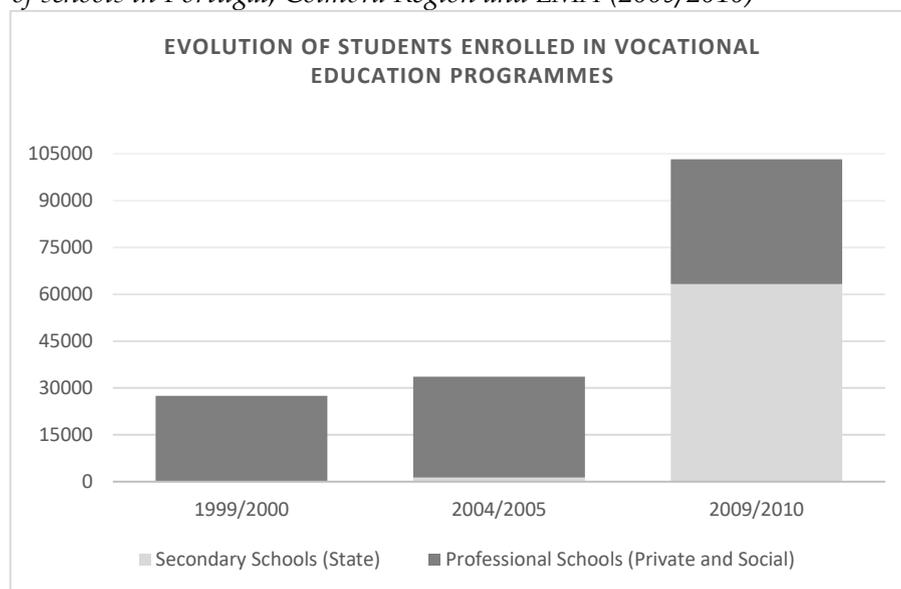
It was in 1989, with Decree-Law No. 26/1989, that a vocational secondary education subsystem was created, and between 1989 and 1993, vocational schools were launched and technological courses were created in secondary education (Rodrigues, 2019). Almost a decade after the last scholar year considered in this study, Rodrigues (2019) noted that vocational education in Portugal remains largely private. Therefore, having been launched in the late 1980s and early 1990s, vocational education has always been dominated by the private sector.

Joaquim Azevedo – who was a member of the Government in the early 1990s and one of the agents responsible for launching vocational education in Portugal – describes the evolution of the implementation of vocational education in Portugal in three phases, the first between 1989 and 1993 – marked by a ‘determined’ launch –, the second between 1994 and 2005 – with a “clear slowdown” and political hesitation – and the third after 2005 – with vocational education returning to political priorities – (Azevedo, 2014).

Only in the third phase, which began in 2004/2005, did the State come to represent a considerable share of vocational education provision, which until then – and even now remains robust – was predominantly private or social (Private Social Solidarity Institutions) (Figure 7).

Figure 7.

Total number of schools in Portugal, Coimbra Region and LMA (2009/2010)



Source: Prepared by the author (2025), based Azevedo (2014).

Another relevant element is artistic and specialized education. In the early 1990s, this type of education was available in three cities in the country (Lisbon, Porto, and Braga) and in only five schools (Fernandes et al., 2014). After several legislative and political initiatives, a few public institutions for music and dance education were created, resulting, however, in a very modest network – which remains in place until the middle of the second decade of the 21st century – located on the country's coastline and in the Lisbon-Porto axis, leaving the interior and southern part of the country uncovered, with large areas of the country lacking a public institution of reference in the field of specialized music and dance education (Fernandes et al., 2014).

Furthermore, the authors point out that in 2007, the artistic education evaluation team warned of the interest in resuming a policy of defining the mission of artistic education as a whole and applying the integrated system as the norm, having detected that the lack of definition expressed by the actors and felt in the mismanagement of schools was related to a desired but unplanned growth, which occurred mainly in private education.

In a text from the beginning of the Millennium, António Nóvoa (2002) pointed to the existence of two major trends, which sometimes overlap: the reconstruction of education as a private space and the renewal of education as a public space. As the basis for the “school crisis”, which he warned about, Nóvoa explains the origin of various reactions that seek to “protect” children in private spaces, justified sometimes by social arguments (lack of values and increasing violence in schools) and sometimes by academic arguments (poor teaching and mediocre teachers).

The author also states that the “combination of individualism based on family and religious environments with a logic of market and competition has proven very powerful and influential” (p. 12).

Market logic gained strength in 2001, when school rankings were implemented for the first time. Since then, schools across the country – regardless of type – have been ranked annually, originally based on the results of 12th-grade national exams (Mendes et al., 2003). The year this annual “tradition” was launched was precisely the second of the millennium, and therefore falls within the beginning of the period analyzed.

According to Alves et al. (2006), rankings have become assessment tools of schools and, therefore, of teachers’ work. They have also become an objective benchmark for parents and guardians. In 2003, João Barroso presented the perspective of “regulation of the education system” as a “system of regulations,” where it becomes necessary to value the role of the various instances (individuals, formal or informal structures), highlighting the complexity of the regulation processes. We believe this is an insightful view, as the various actors influence and are influenced, reacting and provoking reactions.

In a work that portrays education between 1986 – the year of Portugal's entry into the European Union and the implementation of the Basic Law of the Education System – and 2006, Lima (2006, p. 24) noted a common tendency to criticize the bureaucracy of the Ministry of Education, which “was part of an ideology critical of the welfare state and public administration, in which the decentralization of education was articulated with state reform and with prospects for decentralization and privatization”. These academic contributions allow us to frame the panorama surrounding school education, reflecting the discourses of the time and the pressures placed on schools. Several authors also point to a growing market logic surrounding schools (Pacheco, 2001; Barroso, 2003).

The context of the time, through literature, helps us understand the complex reality we are now analyzing, based on the study's results. This is a reality in which discourses surrounding market mechanisms, neoliberal models, and the logic of competitiveness were intensifying. At the same time, we can reflect on a country operating at “two speeds”, with a very distinct reality, in terms of supply and its evolution, in the capital and its surrounding area, and in a region in the center of the country.

From an educational perspective, several questions arise. On the one hand, there are the asymmetries between the LMA and the Coimbra Region or, more broadly, within the country. Another question that arises is what makes the public and private offerings so similar in the case of the LMA. The evolution indicates an unequivocal trend toward convergence, but without allowing us to understand the reasons.

5. Conclusions

During the first decade of the new millennium, the school building network of non-higher education in Portugal evolved with a strong territorial differentiation and structural transformation.

Vocational education grew particularly during the period covered by the study, which may help to explain some of the data. The prevalence of private and social provision in vocational education, which gained momentum, albeit in a fluctuating manner, after 1989 and especially after 2005, should be taken into account. Similarly, artistic and specialized education, which predominates in few cities in the country and is mainly concentrated in Lisbon, is another factor to consider in this analysis.

In general, we can argue that, in addition to a greater educational provision in terms of curricula or programs—between “regular,” vocational, artistic, etc.—which help to understand the issue in part, there is also a market logic that has gained ground over the last few decades, emphasized by school rankings, implemented in Portugal since 2001.

In this way, the Lisbon Metropolitan Area, which has grown demographically, in the period considered, has developed a phenomenon of more educational interregulation compared to the Coimbra Region. The various factors listed contribute to this phenomenon, exposing not only the vulnerability of public education provision in Portugal's largest metropolitan area, but also asymmetries and inequalities in access to diversified provision.

Overall, the national network of non-higher education establishments contracted by more than one third, with a marked reduction in public schools and a relative increase in private provision. This transformation reflects not only demographic changes—particularly the decline in the school-age population—but also the effects of educational policies aimed at rationalizing the network and promoting greater efficiency in resource management.

At the regional level, the analysis of the Coimbra Region and the LMA demonstrates distinct dynamics. In Coimbra, characterized by lower population density and more dispersed settlements, the reduction in public supply was particularly pronounced, and private education did not expand enough to offset this contraction. Conversely, in the LMA, the moderate reduction in total institutions was accompanied by a clear growth in private supply, which by 2009/2010 reached parity with public provision. This reinforces the idea that school network evolution is closely linked to territorial and socioeconomic characteristics.

It is worth noting the significant growth in the school population in the years leading up to the period studied—and even during the period itself. This growth reflects a democratization of various levels of education, particularly preschool and secondary education, posing new challenges for schools. The state has also increased its investment of GDP in the education sector over the years, with Portugal making a considerable effort to achieve a more educated population.

The results suggest that the restructuring of the Portuguese school network over the period studied was driven not only by demographic and geographic factors but also by broader social and political logics. The expansion of private education in urban centers such as Lisbon reflects both a response to family demand and a gradual acceptance of market-oriented principles within the education sector.

In more peripheral or rural regions, however, rationalization led to the closure of smaller schools and a concentration of resources, often generating greater distances between students' homes and schools and, consequently, new inequalities in access.

From a policy perspective, the findings highlight the importance of balancing efficiency objectives with territorial equity. Future public policies must consider demographic evolution and regional disparities to ensure that the reorganization of the school network does not exacerbate pre-existing inequalities. Furthermore, the experience of the 2000s emphasizes the need for stronger monitoring of private sector expansion and for mechanisms that guarantee social cohesion and equal access to education.

Another element we would like to address is how private schooling is viewed by the population, as this varies over time. It is safe to say that there is a before and after 2001, with the intensification of competition between schools (public and private) due to the implementation of annual rankings. Even so, rankings alone do not justify the evolution of supply, and it would be imprudent to assert this without other data, especially since we have observed two distinct reactions from two areas of the same country in this study.

For future research, it would be relevant to extend the analysis beyond 2010, integrating the effects of new educational policies implemented after the economic crisis and the growing digitalization of teaching. Comparative studies between regions or with other European countries could also contribute to a deeper understanding of the relationship between demographic trends, governance models, and educational infrastructure. Ultimately, this study reinforces the notion that the school network is not only a logistical system but also a social and territorial indicator of equity, development, and modernization.

6. References

- Alves, M. P., & Tomé, I. M. N. (2006). Os rankings das escolas secundárias em Portugal: da (s) intencionalidade (s) política (s) à sua representação nos professores. *Revista Portuguesa De Pedagogia*, (40-3), 237-252. https://doi.org/10.14195/1647-8614_40-3_10
- Azevedo, J. (2014). Ensino profissional em Portugal, 1989-2014: os primeiros vinte e cinco anos de uma viagem que trouxe o ensino profissional da periferia para o centro das políticas educativas. *MDL Rodrigues*, 40, 411-468. <https://acortar.link/nmF3nT>
- Barrera-Osorio, F. (2007). The impact of private provision of public education: empirical evidence from Bogota's concession schools. *World Bank Policy Research Working Paper*, 4121. <https://acortar.link/9d2vzd>
- Barroso, J. (2003) Regulação e desregulação nas políticas educativas: tendências emergentes em estudos de educação comparada. In João Barroso (Org.) *A Escola Pública – Regulação, desregulação e privatização* (pp. 19-48). Porto: Asa editores.
- Canário, R. (2006). Aprender sem ser ensinado. A importância estratégica da educação não formal. In *A Educação em Portugal (1986-2006). Alguns contributos de investigação* (pp. 207-267). Lisboa: Conselho Nacional de Educação.
- Candeias, A., & Simões, E. (1999). Alfabetização e escola em Portugal no século XX: Censos Nacionais e estudos de caso. *Análise Psicológica*, 17(1), 163-194. <https://scielo.pt/pdf/aps/v17n1/v17n1a17.pdf>

- Egalite, A. J., & Wolf, P. J. (2016). A Review of the Empirical Research on Private School Choice. *Peabody Journal of Education*, 91(4), 441-454. <https://doi.org/10.1080/0161956X.2016.1207436>
- Fernandes, D., & Paz, A. (2014). Da génese das tradições e do elitismo ao imperativo da democratização: a situação do ensino artístico especializado.
- Hoxby, C. M. (1994). *Do private schools provide competition for public schools?*.
- Lima, L. (2006). Administração da Educação e Autonomia das escolas. In *A Educação em Portugal (1986-2006). Alguns contributos de investigação* (pp. 5-66). Lisboa: Conselho Nacional de Educação.
- Lubienski, C. (2006). School Choice and Privatization in Education: An Alternative Analytical Framework. *Journal for Critical Education Policy Studies*, 4(1).
- Lubienski, C. A., & Lubienski, S. T. (2013). *The public school advantage: Why public schools outperform private schools*. University of Chicago Press.
- Mendes, A. N., Costa, J. A., & Ventura, A. (2003). Ranking de escolas em Portugal: um estudo exploratório. *REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, 1(1), 0.
- Nóvoa, A. (2002). "O espaço público da educação: Imagens, narrativas e dilemas". In *Espaços de Educação, Tempos de Formação* (pp. 237-263). Lisboa: Fundação Calouste Gulbenkian.
- Pacheco, J. A. (Org.) (2001). *Políticas Educativas. O Neoliberalismo Educacional*. Porto: Porto Editora
- Quaresma, M. L. (2015). O ensino público no olhar das elites escolares: representações sociais dos agentes educativos de dois colégios privados. *Sociologia: Revista Da Faculdade De Letras Da Universidade Do Porto*, 30. <https://ojs.letras.up.pt/index.php/Sociologia/article/view/1278>
- Teese, R. (1986). Private schools in France: Evolution of a system. *Comparative Education Review*, 30(2), 247-259.
- Rodrigues, L. (2019). O ENSINO TÉCNICO-PROFISSIONAL EM PORTUGAL. *Revista Da Faculdade De Educação*, 14(2), 13-34. <https://periodicos.unemat.br/index.php/ppgedu/article/view/3753>
- Silva, C. M. (2022). Escola em meio rural e medidas de concentração escolar: o caso da zona geográfica do Pinhal Interior Sul, Portugal (início do século XXI). *Práxis Educativa*, 17, 1-21. <https://doi.org/10.5212/PraxEduc.v.17.18513.004>
- Stiglitz, J. E. (1974). *The demand for education in public and private school systems*.
- Verdasca, J. (2017). *Escolaridade obrigatória, diferenciação de trajetos, equidade e sucesso no sistema educativo: garantir aprendizagens de qualidade para todos*. CNE.

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