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The absence of the Algebra rubric in the prescription of official regulations for primary education in Espírito Santo (1854 – 1927)

A *rubrica* Álgebra na prescrição de normativas oficiais do ensino primário capixaba (1854 – 1927)

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Abstract

It outlines the "mathematical" rubrics indicated in the official documents of Espírito Santo's primary education, in the period 1854 to 1927, to capture the presence or absence of Algebra. Investigate the Reports of the Presidents of the Province; Public Instruction Regulations; State Decrees; Educational Programs, in short, the Educational Legislation in force at the time. It points out, through the analysis undertaken in these historical sources, that the heading Algebra, in primary education, both in the 1800s and in Espírito Santo republicanism, was not constituted as a matter of significant importance, as it was indicated only in 1892, with the Moniz Freire reform, determining, in addition to easy applications, to be given to boys.

Keywords: Educational Legislation, Math, Algebra, Primary school

Resumo

Delineia as rubricas matemáticas indicadas nos documentos oficiais do ensino primário capixaba, no período de 1854 a 1927, com o intuito de captar a presença ou ausência da Álgebra. Investiga os Relatórios dos Presidentes da Província; Regulamentos da Instrução Pública; Decretos Estaduais; Programas de Ensino, enfim, a Legislação Educacional vigente à época. Aponta, por meio da análise empreendida nessas fontes históricas, que a rubrica Álgebra, no ensino primário, tanto no período oitocentos quanto no republicanismo capixaba, não se consolidou como uma disciplina, haja vista ter sido indicada apenas no ano de 1892, com a reforma Moniz Freire, determinando além de aplicações fáceis, ser ministrada para meninos.

Palavras-chave: Legislação Educacional, Matemática, Álgebra, Ensino Primário

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Preliminary Considerations

The article³ we present here seeks to delineate the "mathematical" rubrics indicated for primary education in the state of Espírito Santo during the period 1854 - 1927, among them Algebra in the state of Espírito Santo. To do so, it was necessary, at first, to get hold of the public instruction regulations; teaching programs; governmental reports; newspapers; laws and decrees to identify the prescribed Mathematics. In view of this, we listed some questions, namely: was the rubric Algebra present in the official legislations destined to primary education? Was this knowledge constituted only in secondary education?

To answer them, we conducted a qualitative, historical-documentary research. Therefore, since this is a historical study, it is our duty to reflect on our understanding of this science. The historian Marc Bloch (2001) teaches us that history is the "science of men in time" (p. 55). In this sense, history does not seek to study past knowledge, but rather, human actions and transformations over time. From this perspective, history is a science that arises in the present from the traces left in the past. To find such traces, it is necessary to resort to documental sources, after all, "we really mean by documents only a trace, the mark perceptible to the senses" (Bloch, 2001, p.73).

For this, it is important to recognize that sources are not holders of an absolute, incontestable truth, they are documents, in which one finds, through reading and analysis, historical knowledge, but that, in fact, it is "first and foremost the result of a montage, conscious or unconscious, of the history, the time, the society that produced it" and, therefore, they carry intentionalities by the groups that forged them (Le Goff, 1996, p.546).

Furthermore, documentary sources, according to Bloch (2001), do not speak for themselves. Therefore, it is essential that the historian analyze them critically, questioning them, or rather, extorting them, so that only then it will be possible to extract from them the answers to our longings. It is the historian's task to behave as an observer who tries to relate, question, interpret and analyze the documentary sources.

We are not seeking to bring to light a full and unquestionable truth of a lived past, but a historiographical writing that allows us, as Chartier (2010) would say, to see the dead with our eyes, or rather, to see a past already forgotten, with a look that enables us to understand our social, political, economic, school and cultural identity. In view of this, we emphasize that it is not possible to completely relive the various places, moments, and discourses of remote times, especially between the decades of 1854 and 1927.

To think this way is to conceive historical writing as a representation of a given social

³ It refers to a section of the master's research, entitled: The constitution of the rubric Algebra in capixaba territory (1843-1935), oriented by Prof. Dr. Moysés Gonçalves Siqueira Filho. (1843-1935), oriented by Prof. Dr. Moysés Gonçalves Siqueira Filho.



reality and not a reconstitution of it as it was. Therefore, Chartier (2002) alerts us that the representations are like "intellectual schemes, which create the figures thanks to which the present can acquire meaning, the other become intelligible, and space be deciphered" (p. 17). Furthermore, representations provide the opportunity to infer various meanings in the present of something that is absent, but they lead us to decipher the past and this "does not mean that history repeats itself, but rather to highlight that it can seek knowledge and help the critical understanding of the innovations of the present, which, in turn, seduce and disturb us" (Chartier, 2017, p. 9).

That said, representations are social constructions of a historical time, constituted by the interests of the subjects. For this reason, we sought to trace a representation about the trajectory of the rubric Algebra, in the state of Espírito Santo. This required us, not only to understand the educational guidelines for its teaching, but also to consider the social, political, and economic aspects in force at that time.

An examination of the official norms for primary education in Capixaba: absence of the rubric Algebra.

Considering that the writing of a history is not linear, but discontinuous, we turn our eyes to the Law of October 15, 1827, considered by Valente (2012) as the first law, after the Proclamation of Independence (1822), about Brazilian public education. This federal norm established the creation of schools of first letters in all cities, towns, and most populous places of the Empire.

Before that, however, Brazilian education was at the mercy of the Jesuits⁴, whose domination lasted until they were expelled by the Marquis of Pombal and, since then, Jesuit methods and education were radically reformulated (Carvalho, 2008).

Over the course of 210 years, 1549 to 1759, the Jesuit school organization was based on the document *Ratio atque Institutio Studiorum Societatis Jesus, better known as Ratio Studiorum*, considered the first one that systematized Brazilian education. During this period, Mathematics was seen as a support to the teaching of Physics and Geography. Moreover, it was limited to the basics of Arithmetic and Euclid's Geometry. Algebra was not present in the educational establishments, although in Europe there was already the development of scientific productions involving this branch of Mathematics (Mondini, 2013).

As already mentioned, with the Law of October 15, 1827, there is the determination to create schools of first letters in all cities and towns. Is it possible to affirm that the rubric

⁴ The Jesuits arrived in the Brazilian colony in March 1549, when the Governor General, Tomé de Souza, landed in Brazil. After 15 days, they founded the first Brazilian elementary school in Salvador. This school was under the responsibility of Brother Vicente Rodrigues, the first teacher to work in Brazilian soil, who sought to propagate the religious faith (Mondini, 2013).

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Algebra was indicated to be taught in these schools? According to articles 6 and 12, the students should learn

Art. 6: to read and write the four operations of arithmetic, practice of broken, decimals and proportions, the most general nations of practical geometry, the grammar of the national language, and the principles of Christian morals and the doctrine of the catholic and apostolic Roman religion, proportioned to the understanding of the boys; preferring for the readings the Imperial Constitution and the History of Brazil.

Art. 12 - The teachers, besides what's declared in art. 6, excluding geometry notions and limiting the arithmetic instruction to its four operations, will also teach the domestic economy skills (Law 1827).

For Valente (2012), this program that teachers should teach was the first enacted by the Legislative General Assembly and remained in schools until the year 1854. As we see, the Algebra rubric distanced itself from the first literate schools in the Empire. And in the capixaba territory? Was it present in the norms destined to primary education?

According to the official documents of the state of Espirito Santo, until 1854 the provincial legislation of Espirito Santo was governed by the Regulation of Law No. 6, of May 4, 1848. This regulation structured public schools of primary instruction in two classes: the first, located in more urban centers; and the second, created in regions with lower population. Primary instruction for the female public followed the same program as the second-class schools (Gaudio, 2010). However, it included the study of embroidery, sewing and other domestic chores (Public Instruction Regulation, 1848). The curriculum of the elementary school comprised:

Art. 2nd In the first class will be taught reading, writing, the rudiments of grammar of the national language, the theory and practice of arithmetic up to and including proportions, the most general notions of practical geometry, Christian morals, and the doctrine of the state religion.

Art. 3rd In the second class, the teaching will cover the same subjects of the previous article, excluding geometry and limited to the arithmetic theory and practice of the four operations of whole numbers (Regulation of Public Instruction, 1848).

As a result, the teaching of mathematics was restricted to the most general notions of practical geometry and the theory and practice of arithmetic, sometimes contemplating proportions, sometimes the four integer operations.

For Mondini (2013), the years from 1840 to 1850 were marked by deep debates between liberal and conservative politicians about the intervention or not of the State in Brazilian public education. These political groups, as Carvalho (2008) pointed out, were formed by distinct coalitions. The Conservative party was represented by the union of magistrates and rural landowners; and the Liberal Party, by liberal professionals such as journalists and lawyers. Still according to the author, these two-party groups emerged after the decentralization produced by

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the Code of Criminal Procedure in 1832, the Additional Act of 1834, and the regency rebellions.

With the promulgation of the Additional Act, on August 12, 1834, the Brazilian empire underwent some innovations regarding education in Brazil. According to Castanha (2013), this Law decentralized primary and secondary public instruction in Brazil. Due to this, the provinces were granted more administrative autonomy, encompassing the right to create and legislate their own educational systems, according to their local needs. Furthermore, the Additional Act contributed to "democratizing access to primary education, speeding up the process of creating, hiring teachers and inspecting schools" (p. 311).

Although the Regency Period (1831 - 1840) was marked by deep political agitations, the province of Espírito Santo, in this scenario, presented a political language, but did not indicate a party formation, either liberal or conservative. The first political denominations emerged throughout the 1840s and 1850s: Bermudists and Dionisians represented, respectively, by Father Inácio Bermudes and Colonel Dionísio Rozendo (Siqueira, 2016).

While political denominations began to emerge in the capixaba province, a new reform, known as Reforma Couto Ferraz⁵, approved by Decree No. 1331, of February 17, 1854, would present itself on the Brazilian scene and would become a reference for other Brazilian provinces (Mondini, 2013), especially, in the reforms of public instruction. In fact, the state of Espírito Santo, in 1861, published a new Regulation, taking the Couto Ferraz Reform as a model and that would be in force until 1873, when another one was enacted (Gaudio, 2010).

While the Couto Ferraz Reform⁶ had become a watershed in relation to the organization of Brazilian public instruction, since the ideas introduced by the then minister were aggregated in the provincial reforms, especially those aimed at controlling the teachers' work (Castanha, 2013), the capixaba province faced some social mishaps. It was, more precisely, in November 1854, according to Oliveira (2008), that a cholera⁷ outbreak hit the Espírito Santo population, leading hundreds of people to their graves. With this, according to the same author, the society lived dramatic days, "because the disease immobilized countless arms, bringing about hunger and misery" (p. 369). For this reason and for the ignorance of the disease, Franco (2014) states that, among all the epidemic outbreaks that occurred in capixabas' lands, cholera was, without a doubt, the one that caused greater panic and terror.

⁵ Luiz Pedreira Coutto Ferraz was born in 1818 in Rio de Janeiro. He graduated in Law from the University of São Paulo. He served as a deputy in the Province of Rio de Janeiro in 1845. In the following year, he was elected president of the Province of Espírito Santo and, in 1848, of the Province of Rio de Janeiro. He died in 1886. For the author, Coutto Ferraz was one of the men who was most involved in defending education (Castanha, 2013).

⁶ Most provincial presidents sought to build on the precepts of the reform, while seeking to adapt it to local needs (Castanha, 2013).

⁷ Cholera originated in the Lower Bengal region, located in India. It arrived with great intensity in Europe in the 19th century. However, the West already knew about it since the 15th century, due to its trade with the East. According to the author, the church and the population believed that this epidemic outbreak would have occurred because of sins committed by men (Franco, 2014).

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Still, according to Franco (2014), it was not easy for the government of the province of Espírito Santo to support the entire population affected by the cholera outbreak. Given this reality, many were the factors that contributed to the sick not getting the necessary help: lack of doctors, medicines, hospitals, wards, financial resources, among others. However, the author highlights that the epidemic outbreaks that afflicted the population of Capixaba were fundamental for the development of public policies related to health.

Turning our gaze to the first decade of the second half of the Imperial Period, we note, according to the words of the president of the capixaba province, Bacharel Pedro Leão Velloso , in his report of 1859, that until 1848 public instruction was governed by the Law of October 15, 1827. Furthermore, he highlighted the following items, indicated for primary education, as described below:

our regulation divided the schools into two classes, teaching in the first class: - reading, writing, the rudiments of grammar of the national language, the theory and practice of arithmetic up to and including proportions, the general notions of practical geometry, Christian morals, and the doctrine of the state religion; in the second class: - the same, except geometry, and limiting arithmetic to the theory and practice of the four operations of whole numbers (Report of the President..., 1859, p. 49).

According to the excerpt, the mathematical rubrics mentioned by Veloso for the capixaba elementary school were in line with the Regulation of Law No. 6, of May 4, 1848.

A few years later, we see that there were no major changes in Espírito Santo's primary education. According to the Public Instruction Regulation of 1861, primary education was still divided into first and second class and contemplated the same contents highlighted by President Velloso, in his report in 1859, except for the rubric General Notions of Practical Geometry. This statement can be verified below:

Art. 22. In the first-class schools will be taught reading, writing, rudiments of grammar of the national language, the theory and practice of arithmetic until proportions, Christian morals, and Christian doctrine.

Art. 23 In the 2nd class will be taught the same subjects of the previous article, limited the arithmetic to the theory and practice of the four operations of whole numbers (Regulation of Public Instruction, 1861, p.6).

While Brazil was experiencing the dawn of a new political and intellectual era in the Empire, more precisely, throughout the 1870s (Haidar, 2008), the state of Espírito Santo underwent a new reformulation with the publication of the 1873 Regulation that, according to Gaudio (2010), was near to the characteristics of the 1861 Regulation. The teaching established in elementary school by the new Regulation comprised:

Art.35 - The teaching in the first-grade schools comprehends:

1st Reading and writing.

2nd Portuguese Grammar.

3. Exercises of epistolary correspondence.

4. Moral and religious instruction.

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5. Elementary principles of arithmetic and its fundamental operations in whole numbers.

6 - Legal system of weights and measures.

Arti.36 - The teaching in second grade schools includes

1. Development of Arithmetic, in its practical applications, either in broken and decimals, or in complexes and proportions.

2. Principles of rational and moral philosophy.

3rd Elements of History and Geography, of Brazil.

4. Notions of Sacred History.

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5. Principles of the physical sciences, applicable to the uses of life.

6th Elementary grammar and surveying.

7th Linear drawing, notions of music (Public Instruction Regulation, 1873, p.7).

As we can see, in this new educational model, elementary school were divided into first and second grades and, moreover, the rubric General Notions of Practical Geometry remained excluded from the curriculum, according to the Regulation of 1861. However, there was the inclusion of Linear Drawing, linked to geometric elements. Other subjects were also included, such as: Epistolary Correspondence Exercises; Legal System of Weights and Measures; Principles of Rational and Moral Philosophy; Elements of History and Geography, mainly of Brazil; Notions of Sacred History; Principles of Physical Sciences, applicable to life uses; Elementary Grammar and Surveying and Notions of Music.

Four years later, recent changes in public education in the state of Espírito Santo were introduced by the Regulation of 1877. With this regulation, primary education became composed of:

1. Reading and Calligraphy.

2nd Elements of Portuguese Grammar.

3rd. Exercises in epistolary correspondence.

4. Christian Doctrine and Elements of Sacred History.

5. Elements of History and Geography of the country, of the province.

6th Elements of Arithmetic in their applications in whole, decimal, broken and complex numbers.

7. Legal system of feet and measures.

8th Sewing and Needlework, more necessary in the poles for the female sex (Regulation, 1877, p.2).

When comparing the Regulations of 1873 and 1877, we verify in the 1877 regulations the absence of some rubrics, namely: Moral and Religious Instruction; Principles of Rational and Moral Philosophy; Principles of Physical Sciences, Applicable to the Uses of Life; Elementary Grammar and Surveying; Linear Drawing, Notions of Music. In addition, Christian

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Doctrine, and elements of Sacred History; Sewing and Needlework, intended for girls, were added.

| SUBJECTS PROVIDED IN PRIMARY EDUCATION | | |
|--|---|--|
| 1873 | 1877 | |
| Reading and Writing | Reading and handwriting. | |
| Portuguese Grammar. | Elements of Portuguese Grammar | |
| Exercises of epistolary correspondence | Exercises of epistolary correspondence | |
| Moral and religious instruction. | SUPREME. | |
| Elementary principles of Arithmetic and | Elements of Arithmetic in its applications to | |
| its fundamental operations in whole | whole, decimal, broken and complex numbers. | |
| numbers. | | |
| Development of Arithmetic, in its | | |
| practical applications, either in broken | | |
| and decimal numbers, or in complexes | | |
| and proportions. | | |
| Legal system of weights and measures. | Legal system of weights and measures. | |
| Principles of rational and moral | DELETED | |
| philosophy. | | |
| Elements of History and Geography, of | Elements of History and Geography of the | |
| Brazil. | country, of the province | |
| Notions of Sacred History. | Christian Doctrine, and elements of Sacred | |
| | History. | |
| Principles of physical sciences, | SUPRIMIDA | |
| applicable to the uses of life. | | |
| Elementary grammar and surveying. | SUPPRESSED | |
| Not offered. | Sewing and needlework most needed in schools | |
| | for the female sex. | |
| Linear Drawing. | SUPPRESSED | |
| Notions of Music. | SUPPRESSED | |

In Table 1 are listed the rubrics indicated for the capixaba elementary school in the years 1873 and 1877.

 Table 1 Subjects planned for elementary school in the capixaba province - 1873 and 1877

Source: Adapted from the 1873 and 1877 Regulations of the Capixaba province

From the above, we realize that the headings Geometry and Algebra were still not part of primary education, which leads us to the following question: why were these disciplines not Zetetiké, Campinas, SP, v.30. 2022, pp.1-15 -022015 ISSN 2176-1744

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assigned to capixaba's primary education? A possible answer to this questioning may concern the survival of the capixaba society, which was characterized by being elementary, that is, a society, according to Gaudio (2010, p.174) economically agricultural, with a population "so humble and 'ignorant'" that they were left with "only rudimentary studies of arithmetic.

With the advent of the Republic, the capixaba territory aspired to an era of modernity and progress, and this was personified with the inauguration of the governor José de Melo Carvalho Moniz Freire (1892 - 1896), who, upon taking office, had "the goal of putting his political plan into practice and building the capixaba Republic" (Siqueira, 2016, p.231). However, he was faced with a weakened state, due to droughts, frequent epidemics, lack of public roads, among other factors (Report, 1896).

Moniz Freire⁸, a follower of positivism, printed a representation to the people of the state that he would be the subject capable of "making possible the organization of a strong society, and, moreover, manage to promote the expansion of productive forces for the development of the state" (Siqueira, 2016, p.239). Also, according to Siqueira (2016) one of the propelling elements to leverage the state of Espírito Santo would be the construction of railroads since they could expand the mercantile flow and export.

Synchronously, he sought to reorganize the capixaba public instruction, through Decree No. 2, of June 4, 1892, ⁹. In its "Art. 25th - The primary schools of the male sex, in the normal regimen that this regulation definitely proposes to create, will profess":

1° Reading from the graphical study to the correct recitation of any passage of prose or verse; memory exercises through the retentive poetry of national or foreign authors, written and oral exposition of easy topics.

2° Calligraphy exercises.

3° Intuitive lessons, which should be conducted without affectation and without effort, to develop all the logical processes of understanding, from the initial intuition of number and extension to the contemplation of the moral order.

4° Notions about the general phenomenon of number, extension, movement, properties of bodies, life, organization, human development, domestic and social morality, always starting from the empirical to the abstract, until we can reach the formulation of the law.

5° Arithmetic operations, fundamental and applied, having only as objective the teaching of accounting.

6° General notions of the destiny of algebra and geometry with an appreciation of facile applications.

⁸ José de Melo Carvalho Moniz Freire, better known as Moniz Freire, served as president of the state of Espírito Santo in the periods of (1892-1896) and (1900-1904).

⁹ "The objective of this Decree was primary education; all others, even higher education, can take advantage of it, but only incidentally" (Message from the president..., 1893, p. 122).

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7° Notions of geography, especially of the State, and of the country, and notions of natural history.

8° Conversations and proposals about Brazil and especially the State, its political, commercial, and financial situation, its government, its eminent men, its institutions, its Constitution; reading and assiduous commentaries on the State Constitution;

9° Exhortation to patriotism, to the love of the family and the love of humanity;

10° Portuguese grammar, always preferring intuition to the rule, and absolutely avoiding unconscious repetition.

11° Conversations about agriculture, machines adopted to the service of farming, processes of improvement of products, producer, and consumer markets of national products - in the rural areas; about factories etc. in the city and town areas [emphasis added] (Decree 02, 1892).

That said, we note that the rubrics General Notions of the Destination of Algebra and Geometry were explicitly present, among others. This nomenclature leads us to infer a general, or superficial, teaching of Algebra and Geometry, covering easy and simple applications.

It seems that this reform, in terms of what was required in elementary school mathematics, was close to the Benjamin Constant Reform, because, as Mondini (2013) has pointed out, the rubric General Notions of Algebra was included in primary education because of the reorganization of education proposed by Benjamin Constant¹⁰.

From 1900, the state of Espírito Santo experienced a governmental era characterized, according to Oliveira (2008), by wide benefits to the capixaba society, such as: "opening of roads, promotion of agricultural production, improvement of cattle herds, construction of the Paineiras sugar mill - at the time considered the best in Brazil, development of public education, and improvement of the administrative apparatus" (p. 442).

It was, therefore, in this context that Jerônimo de Souza Monteiro idealized a new reform of public education in the state of Espírito Santo. Thus, after assuming the presidency of the state, in 1908, he sought in the state of São Paulo the educator Carlos Alberto Gomes Cardim, whose arrival in the state dates from June 29, to take charge of the new educational model and, with this, he was appointed General Inspector of Education. For Salim (2009, p. 181) this "reform was, without a doubt, the most emblematic educational landmark of the First Republic" (p. 181).

In view of this, the new legislation for elementary school would be implemented by State Law No. 545 of November 16, 1908. The norm established the obligation of primary education for all children from 7 to 12 years old and contemplated the following teaching subjects: "Reading, grammar, writing, calligraphy, arithmetic, geometry, general geography,

¹⁰ The reform, conceived by Benjamin Constant, on November 8, 1890, through Decree No. 981, was an attempt to organize education nationwide, away from religious principles; however, it succeeded only in the Federal Capital, Rio de Janeiro, at the time.

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geography of Brazil and cosmography, history of Brazil, notions of physical and natural sciences, music, drawing, gymnastics, military exercises and manual work" (Law 545, 1908).

In the decades that followed, the ideals disseminated through the Gomes Cardim Reform were still present in the new official legislations. In relation to the teaching subjects for elementary school, Decree no. 4325, of April 16, 1921, in relation to Law no. 545, excluded only Military Exercises and included Notions of Agriculture (Decree 4325,1921). Later, in Decree No. 6501 of December 20, 1924, military exercises remained, and Notions of Agriculture was deleted and in the place of the rubric Geometry, Notions of Geometry was included (Decree 6501, 1924). In terms of teaching methods, these legislations indicated the simultaneous method, with intuitive teaching being compulsory.

Chart 2 illustrates a comparison to facilitate the visualization of the changes that occurred with the new legislations for primary education.

| SUBJECTS PROVIDED IN PRIMARY EDUCATION | | | |
|--|---------------------------------|---------------------------------|--|
| 1908 | 1921 | 1924 | |
| Reading | Reading | Reading | |
| Grammar. | Grammar. | Grammar. | |
| Writing. | Writing. | Writing. | |
| Handwriting. | Handwriting. | Handwriting. | |
| Arithmetic. | Arithmetic. | Arithmetic. | |
| Geometry. | Geometry. | Geometry. | |
| General Geography. | General Geography. | General Geography. | |
| Geography of Brazil and | Geography of Brazil and | Geography of Brazil | |
| Cosmography. | Cosmography. | | |
| History of Brazil. | History of Brazil. | History of Brazil. | |
| Notions of Physical and | Notions of Physical and Natural | Notions of Physical and Natural | |
| Natural Sciences. | Sciences. | Sciences. | |
| Music | Music | Music | |
| Drawing. | Drawing. | Drawing. | |
| Gymnastics. | Gymnastics. | Gymnastics. | |
| Military Exercises. | SUPPRESSED | SUPPRESSED | |
| Manual Work | Manual labor. | Manual labor. | |
| Not offered. Notions of Agriculture. | | SUPPRESSED | |

| Table 2 Comparative of the subjects foreseen for element | ntary school in the state of Espírito Santo - 1908, 1921 | |
|--|--|--|
| and 1924 | | |

Source: Law No. 545 of November 16, 1908; Decree No. 4325 of April 16, 1921; Decree No. 6501 of December 20, 1924

Practically all the subjects provided for since the Gomes Cardim Reform in 1908 were maintained in the new educational norms, except Military Exercises and Notions of Agriculture.



Nineteen years after the Gomes Gardim Reform, more precisely in 1927, public education imprinted in the capixaba scenario a new organization. Thus, Arithmetic was present in the four years of the Elementary Primary Course and should be taught "by means of lathes, tablets or other objects that children can manage. For the teaching of Arithmetic in the first year, "Exercises on Parker's cards and the American counter" was indicated. The former was also recommended for the second year. Geometry was renamed Geometric Morphology and was included in the second, third and fourth years. For its teaching, it was recommended in the second year the "direct observation of objects" and in the third year the "use of the compass", finally, in the fourth year, "construction" (Resolution 375, 1927). These characteristics remind us, still, of an intuitive teaching, as also presented in Decree no. 230, of February 2, 1909, since the teacher should continue with the teaching of Arithmetic through concrete: "The lessons of arithmetic will be exclusively practical and the teaching of numbers and tables should be made absolutely concrete, giving the teacher the idea of quantity to awaken in the student the idea of number" (Decree 230, 1909).

Some considerations

Recognizing the writing of history as a representation of the past, we searched for traces and tracks to build the historical path of the Algebra rubric in Capixaba. Of course, we didn't try to narrate a linear and incontestable history, but we tried to create a plot that would enable its insertion or exclusion along its configuration process.

To this end, we went through the educational guidelines for primary education. Before that, however, we pointed out the following question: was the rubric Algebra present in the official legislations for elementary school? Was this knowledge constituted only in secondary education? With the analysis of the official legislations, we noticed that the rubric Algebra was not commonly indicated for primary instruction.

With the end of the Empire and the arrival of the Republic, an intense debate about education began. The reform instituted by Benjamin Constant, in 1890, was an attempt to organize Brazilian education away from religious principles throughout the country; however, it only succeeded in the Federal District. Two years later, the state of Espírito Santo promoted the first reform of the republican period, which indicated the heading General Notions of Algebra for primary education. For the first time, the word Algebra was presented in a rubric of the elementary school norms. However, in the following decades, it was again not part of the local legislations.

Therefore, in this game of non-existence of the Algebra rubric, we raised the following questions: why research the presence of Algebra in elementary education? What is the relevance of presenting a study that concludes that Algebra is absent? This observation was important because, when we investigated documents destined to the Escola Normal Capixaba, we noticed the insertion of Algebra, and then two other problematic issues arose, namely: if teachers wouldn't teach Algebra in elementary school, then why would they have to learn it during their training? To have a broad education? To know more than their students?

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Regarding Arithmetic, we observed that it was stable, while Geometry had little presence throughout the imperial period. Different rubrics emerged throughout the imperial period to denominate Arithmetic, such as: Theory and Practice of Arithmetic up to Proportions; Elementary Principles of Arithmetic and its Fundamental Operations in Whole Numbers; Development of Arithmetic, in its Practical Applications, either in Broken and Decimal or in Complex, and Proportions, finally, Elements of Arithmetic in its Applications in Whole, Decimal, Broken and Complex Numbers.

The same is true for Geometry, during the period of the First Republic, also called Old Republic (1889-1930): firstly Geometry; later, Notions of Geometry; and, finally, Geometric Morphology.

We infer that the inclusion of Drawing was not a substitution for Geometry, because geometric knowledge, until 1927, remained present in the local state norms, which did not occur, for example, in the imperial period, more precisely in 1873, when the terminology Linear Drawing appeared in the educational norms. The nomenclature General Notions of Geometry was and remained excluded in the official guidelines.

In summary, the analysis of the norms for public primary education in Capixaba showed the absence of the rubric Algebra. However, as already mentioned, it appeared, timidly, in 1892 and, later, under the Gomes Cardim Reform, in 1908, it was no longer part of the new legislations. We may ask ourselves whether there was a lack of conditions on the part of the rulers to take it on as a mandatory subject and important for the development of other areas? Or did society still not lack such knowledge? For sure, what we know is that the rubric Algebra was not consolidated in primary education both in the eighteen hundreds and in the republican period of Capixaba.

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