THE SOURCES OF INFRASTRUCTURAL POWER
Evidence from Nineteenth-Century Chilean Education

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Abstract: The striking development of Chilean public primary education during the nineteenth century has often been noted. Existing explanations emphasize industrialization and social change in shaping societal demand for schooling, and elite consensus, the role of individual leaders, and low levels of inequality and social heterogeneity in shaping the state’s educational provision. This article complements existing state-centered arguments by showing that the institutions of local and regional administration were also crucial in transforming policy changes into real progress in primary education. As Chilean schooling spread and became systematized over the course of the nineteenth century, local state officials not only effectively carried out the state’s educational policies but also refined it independently and even pushed for the deepening of educational development, and particularly the systematic control of schooling.

Chilean primary public education developed rapidly over the second half of the nineteenth century (Newland 1994). By 1900, nearly 20 percent of school-age children attended public primary schools, where most were taught by teachers trained in national normal schools. The curriculum was standardized, based on texts that the national government approved, printed, and distributed nationwide. These developments distinguish Chile from many of its neighbors in terms of the coverage of education; its spread through the national territory; and the extent of centralization, standardization, and oversight.1 Existing scholarship emphasizes several

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1. For a regional comparison of the coverage of primary education as of 1900, see Newland (1994). Although this article focuses on the Chilean case, the implicit comparison to educational development in other Latin American countries, most of which lagged behind Chile by the end of the nineteenth century, should be clear.


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factors in seeking to explain this trend, focusing on the determinants of the supply of education by the state and the demand for schooling among various sectors of society. Factors shaping this supply and demand include industrialization and the development of export agriculture, levels of social and economic inequality, the roles of individual politicians and intellectuals, and the power of a set of broadly liberal ideas about the role of education and the place of the state in its development.

These explanations all help to account for patterns of educational development in Chile. However, the contention of this article is that an overlooked factor also played a crucial role. Proposing an addition to supply-side explanations of educational development, I argue that scholars have paid insufficient attention to the role of state bureaucrats in implementing the policies pursued by state leaders. I find that state bureaucrats crucially contributed to the development of the Chilean state's systematized program of public primary education.¹

The ability to turn policy into outcomes—in this case, to build a regimented and broad system of primary schools—is shaped by the actions of bureaucrats spread throughout the country. Examining Chilean educational development, this article shows that local bureaucrats were crucial not only in implementing policy designed in the Education Ministry but also in pressing their superiors in Santiago to further systematize educational development. Thus, while other factors may explain the origins of efforts to build Chilean schooling in the nineteenth century, this article traces the breadth of those efforts and their accomplishments to the actions of local and regional bureaucrats.

I begin by recounting existing explanations for Chilean educational development, building on a wide range of scholarship. Next I trace the development of Chilean education during the nineteenth century. The subsequent section explores a crucial aspect of this change: a system of primary school inspectors that underlay the systematization of schooling. The regular inspection of Chilean primary schools allowed officials in Santiago to mold education by exercising direct and systematic oversight of teachers and schools throughout the national territory.

The final section moves from the effects of this inspection system to its origins, showing that local officials pushed state leaders to develop sys-

¹ In this essay, education is conceptualized as one aspect of the state's infrastructural power, defined by Michael Mann (1984) as the extent to which a state can implement its policies by penetrating society and territory. Infrastructural power refers to the power of the autonomous state. This theoretical framework presumes, therefore, that one can identify a set of actors and institutions that compose the state and that are independent of societal actors. Thus, the analysis in this article conceptualizes the state as a potentially autonomous organization and uses the official documentation it produced to identify the decisions it made and the policies it sought to implement—without presuming that it is a unitary actor. For a further conceptual discussion of Mann's framework, see Soifer and vom Hau (2008).
tematic oversight of schools in their communities. Local agents, mostly sent from Santiago to serve in their communities, saw educational development as a means to improve their local standing, and their pressure was central in influencing national state leaders to develop a more effective inspection system during a fundamental moment in the 1870s. The conclusion assesses the leverage of this mechanism in explaining educational development.

EXPLAINING EDUCATIONAL DEVELOPMENT IN CHILE

Benavot and Riddle (1988) identify two main groups of explanations for educational development. The first centers on "the key role played by the state in determining the provision and expansion of mass schooling" (191), where the state acts either in the service of class interests or in an effort to inculcate a set of national values in a project of nation building. A second, society-centered, group of explanations focuses on the effects of structural changes, most centrally industrialization and social change, on the demand for education.

This article seeks to complement the existing range of state-centered arguments by showing that the institutions of local and regional administration were also crucial in transforming policy changes introduced at the national level into real progress in primary education. As Chilean schooling spread and became systematized over the course of the nineteenth century, local state officials not only effectively carried out policy but also refined it independently, and even pushed for the deepening of educational development and particularly the systematic control of schooling. I show that the local officials played an essential role in the precocious development of a national primary education system in Chile and suggest an explanation for their commitment to this project. Before proceeding to that task, however, I summarize the existing range of arguments, referring to scholarship on educational development in Chile and in Latin America more broadly.

State-Centered Explanations

According to many scholars, developing a nationwide system of primary schooling could be undertaken only with the concerted commitment of the national state. As Britton (1994, xxii) writes, "The main impetus for change came from the national government, which seemed to be the only institution...that possessed the material resources and political will to carry out such massive undertakings." State-centered explanations for the development of education fall into two main subgroups: ideational accounts, which emphasize liberal consensus among political elites as driving educational supply by the state, and material accounts,
which emphasize low levels of social inequality as a necessary condition of the state’s provision of education. Ideational accounts often additionally emphasize the role of exemplary individuals in “breathing life” into elite consensus (Yeager 2005, 177).

Schooling as a State Project of Social Transformation / The state’s commitment to providing education is often seen as part of a “rational, methodical plan to modernize and reform a traditional society” (Yeager 1983, 150). Support for this effort at dramatic societal transformation depended on a consensus among elites from across the political spectrum that the broad provision of education was necessary for social progress and economic development. This consensus transcended the liberal-conservative divide that split politics in many Latin American countries in the nineteenth century, as individuals from across the political spectrum concurred about the importance of education for order and social stability. As is well known, the liberal-conservative splits did lead to conflict in many Latin American countries—but when and where the consensus about progress did hold, broad sectors of the political elite were relatively unified in placing a high priority on state promotion of educational development.

In the Chilean case, this consensus is aptly summarized by Sol Serrano (1993, 221), who writes that “tanto el pelucionismo dominante en la década de 1840 y 1850 como el liberalismo en formación, compartían aquello que hemos denominado el afán racionalizador del estado del espacio social.” For decades, a consensus in Chilean politics existed on the importance of three key goals related to education. As Serrano (65) writes, these goals

3. Despite their differences on a wide range of issues, prominent politicians and public intellectuals in mid–nineteenth century Chile mostly coincided on this view, as Collier (2003) and Serrano (1993), among many others, have argued. The range of views on education at the time is beyond the scope of this article—my claim here is simply that one commonly cited explanation for educational development in Chile rests on the existence of this consensus.

4. Szuchman (1990, 125) finds a consensus about the role of education in promoting order even between Sarmiento and Rosas in Argentina. More broadly, the stability of the consensus between liberals and conservatives about the role of the state in promoting progress and development has been blurred by scholarly emphasis on the liberal-conservative cleavage in nineteenth-century Latin American politics. Where liberals and conservatives differed was on the content of development, and on the means to be used to promote it. See Bushnell and Macaulay (1994, 180–192) and Mahoney (2001, 31–32).

5. The consensus reached even to the role of religion in education. As Collier (2003, 115) writes: “nobody questioned the principle that it should include an element of religious instruction, although there were sometimes debates on the role of the clergy in imparting it.” Serrano (1993) argues that the most significant flashpoint in the area of religion was conflict over church oversight of secondary school examinations. Woll (1975) focuses on conflicts over religious education that emerged in the context of textbook provision. But most authors find a consensus between liberals and conservatives in the educational realm that endured for most of the nineteenth century. This “modernizing consensus,” as Serrano (1993,
were the following: “formar a todos los estratos de la población en la virtud republicana, incorporar el conocimiento racional a la acción, y el deber de estado de llevar a cabo este cometido.”

Thus, in the view of the scholars cited previously the origins of this consensus are ideational. However, other factors have been referenced as crucial underpinnings of this broad set of shared views. In particular, various features of the socioeconomic context in nineteenth-century Chile that differentiate it from neighboring countries are considered propitious for the emergence of a fairly stable moderate liberalism that held sway for the majority of the nineteenth century. The consensus is often traced to the deep interconnections, uniquely strong in Chile, between rural and urban elites (Valenzuela 1985). In addition, as discussed subsequently, economic historians see the liberal consensus in Chile as rooted in the absence of repressive labor relations, which mitigated socioeconomic inequality as compared to Chile’s neighbors. Finally, the role of individuals in producing or leveraging the broader elite consensus also receives a significant causal role.

Leadership of Exceptional Individuals / Britton (1994, xxii) writes, “A few [Latin American] countries, however, benefited from the determination of the advocates of mass education ... who ... led the expansion of their national school systems.” In some cases, these advocates were fundamental in the creation of a consensus that educational development should be a priority for the state—in Chile the primary example of such a voice was that of Andrés Bello. In other cases, these advocates acted directly to implement policies that promoted the growth of schooling. Bello, in his role as founder of the Universidad de Chile, played this role as well. But the Chilean politician most prominently cited as central to mid-nineteenth century educational development was Manuel Montt. Between the 1830s and 1861, Montt served as rector of the Instituto Nacional, minister of education, minister of the interior, and president (1851–1861). In one of many accounts that emphasize his role, Yeager (2005, 217) writes that Montt “breathed life into the Estado Docente.”

Inequality and Educational Development / A second state-centered current of explanation examines how inequality shapes the state’s provision of

18–19) writes, “era posible porque el catolicismo permanecía como un universo común” in nineteenth-century Chile—which distinguished it from other Latin American countries, such as Mexico and Colombia, where liberals sought a systematic secularizing project the likes of which Chile had never seen.

6. Juan Egaña and Sarmiento are also often cited as fundamental in formulating education policy (Yeager 1991, 75–77).

7. See Jaksic and Serrano (1990) and Serrano (1993) on Bello’s role in the development of Chilean education.
schools. In its broadest form, the argument is that "great equality or homogeneity among the population led, over time, to more democratic political institutions, to more investment in public goods and infrastructure, and to institutions that offered relatively broad access to economic opportunities" (Engerman and Sokoloff 2002, 4). Where inequality was high or the population heterogeneous, this view predicts that suffrage will be narrower, investment in public goods and infrastructure (including primary education) will be lower, and access to economic opportunities will be more restricted (Engerman and Sokoloff 1997).

In applying these predictions to education specifically, Mariscal and Sokoloff (2000) begin from the premise that broad provision of public primary education is a highly redistributive policy because it creates economic opportunities for lower classes, paid for by taxes, which even if regressive, fall more heavily on the wealthy (Ansell 2006; Meltzer and Richard, 1981). The rich can afford private schooling and do not benefit from public schools, which create economic opportunities for the poor. The development of primary education thus rests on the ability of the masses to organize and demand education. But as society becomes more unequal and heterogeneous, the collective action problems to be overcome in organizing to press that demand become more severe. In addition, economic inequality is often associated with political inequality, as the wealthy either predominate in the political arena or, in extreme cases, exclude all other social actors. As inequality rises, the wealthy both have more to lose if the state provides education, and more control over the state, making mass demands for education (should they emerge) less likely to be met.

Mariscal and Sokoloff (2000) trace the precocious development of Chilean education to their claim that Chile's socioeconomic inequality was low vis-à-vis other Latin American countries. They claim that inequality was sufficiently high to make local elites resistant to funding education—meaning that the national government had to get involved. But at the national level, the relatively low levels of inequality (as well

8. This discussion elides the debate within this literature about the relative importance of factor endowments (e.g., resources, land, indigenous population) and political and economic institutions (e.g., suffrage, property rights) in explaining development outcomes. I focus on scholarship emphasizing factor endowments, which has more directly addressed patterns of educational development. On the role of institutions, see Coatsworth (1998).

9. Note that although the authors do not specify the relevant sort of heterogeneity, their case studies focus on the effects of ethnic heterogeneity on the provision of public goods.

10. They also explore the role of immigration, which they find is particularly important in shaping Argentine educational development. The veracity of their claim about the level of inequality in Chile is further discussed here in note 17.

11. Mariscal and Sokoloff (2000) argue that in the United States and Canada, low levels of inequality led to the emergence of locally funded and organized public education. Throughout Latin America, they claim, inequality was sufficiently high to obviate this path of educational development.
as lesser ethnic heterogeneity—that is, the small indigenous proportion of Chile's population) purportedly made it easier for broad sectors of the population to demand increased school provision and made elites more amenable to its provision, as the burdens of paying for education were more broadly distributed. In addition, the relatively low level of inequality is said to have facilitated the broadening of suffrage, increasing the range of preferences about public goods provision that were heard in the political arena (Mariscal and Sokoloff 2000, 184–186).

Society-Centered Explanations: The Demand for Schooling

In contrast to explanations that focus on how inequality shapes state provision of educational development, other explanations depart from an emphasis on social change and emphasize the increasing societal demand for literacy and education. Molina and Palmer (2004) argue that mass pressures shaped the development of schooling in Costa Rica. In their framing, social changes led to a rising interest in literacy by both peasants and urban lower classes who “had discovered that literacy was a tool to facilitate social ascent, to defend one's rights, and to take advantage of new opportunities” (181). These social changes coincided with the establishment of universal male suffrage (173). Taking advantage of their newly found access to politics, these groups pressed for the centralization of primary education. The central state responded positively, taking advantage of this support to implement a “positivist, centralist project” (187). Although the sectors that had promoted educational development were not fully satisfied with the content of the central state's changes, in the end the demand for education led to its expansion.

Documents produced by the Chilean state that reflect its view of schooling show evidence of the demand for education. Bureaucrats at the local and regional levels were besieged with demands for schools from communities throughout the country. The demand was so high that the government was unable to respond to all the requests. To select sites for new school construction, the Education Ministry prioritized communities that promised to donate either a building to be used as a school or an empty lot and the funds for construction (for one reference to the demand for primary schools outstripping supply, see Memoria del Ministerio de Justicia, Culto e Instrucción Pública [MIP] 1870, 28; for the policy of prioritizing school construction where communities supply buildings, see MIP 1872, 36). Thus, the extent to which the demand for education (and the willingness to incur the inherent costs) varied across the country shaped the establishment of new schools.

Demand for schooling in Chile has received little systematic study. Sources produced by government officials do not allow us to accurately assess it, even when it receives prominent and frequent mentions. Official
ministerial reports are not transparent about whether they include all societal demands for schooling. But some evidence supports the suspicion that the demand for schooling in Chile was significant. Chile underwent massive social change during the nineteenth century, driven most prominently by development of agriculture and mining, which created new sources of wealth, new social actors, and new political forces (see Cariola and Sunkel 1990; Ortega Martínez 2005). In addition, by Latin American standards, suffrage in Chile was quite broad, particularly after the 1874 electoral reform (Valenzuela 1985). Social change likely increased the importance of education for a broader sector of Chilean society and thus increased the incentive for demands to be made; at the same time, the relative political openness made it more likely that the state would be receptive to these demands. Thus we might tentatively postulate that societal demand played a role in educational development. However, the analysis in this article, which is based on official documents, can shed no systematic light on the demand for education, which remains a propitious area for further study in the Chilean case.

On the other hand, the empirical analysis here does provide a basis for evaluating the state-centered explanations for educational development. It shows that the elite consensus about the estado docente is a necessary piece of the puzzle of Chilean educational development. In addition, it echoes the finding that certain political and intellectual elites played a prominent role in educational development. But these factors, as I shall argue, are insufficient to explain the growth of the Chilean schooling system. The fundamental puzzle of Chilean educational development is why the policies of the estado docente, most ably promoted by Montt and Bello, were so broadly implemented while similar policies developed by individuals motivated to develop schooling failed to make an impact in other Latin American countries.

To some extent, the material explanations help to answer this question. Although the evidence on absolute levels of inequality suggests that rural inequality in Chile was high, it may have been a less unequal society than others in Latin America. Rural elites in Chile were opposed

12. Cruz (2002) explores the effects of societal demands on educational development. His account of the rise and fall of the humanist plan of studies for Chilean secondary schools contrasts the vision for secondary education in the minds of policy makers and intellectuals with visions articulated by the (mostly elite) sectors of society who enrolled their children in secondary schools.

13. For example, Peru saw two major nineteenth-century efforts to build schools, under Castilla and Pardo, both of which failed despite massive state resources and deep commitment by national elites (Gootenberg 1993; McEvoy 1994).

14. Mariscal and Sokoloff (2000) claim that inequality was relatively low in Chile in regional perspective. They approximate inequality by measuring the rate of suffrage and the proportion of the population identified as indigenous. It is true that on both of these indica-
to educational development, as Mariscal and Sokoloff (2000) claim, both because the taxes to fund it would fall on them and because of the social change it threatened (Bauer 1975, 78 and 169). As the state’s provision of public goods increased, pressures from elites who were reluctant to finance those goods increased (Sater 1976). But unlike in other countries, where local elites were able to derail central state efforts at educational development, Chilean elites were unable to do so. Chile’s bureaucracy was deployed from Santiago, a fact that excluded local elites from most positions of local administration. Had these elites occupied positions in the education bureaucracy, as they did in other Latin American countries, they could have disrupted the government’s efforts to develop education. Instead, the evidence below shows that local state officials were central in increasing the state’s infrastructural power by pushing for broader school provision and more effective educational oversight. Thus, I show that the role of local bureaucrats is a missing component in accounts of the supply of education by the state.

SCHOOLING A NATION: THE DEVELOPMENT OF PUBLIC PRIMARY EDUCATION IN CHILE

In 1830, shortly after the constant fighting of the independence struggle came to a close, Santiago had twenty-six schools with an average attendance of 1,723 students. Only four of these were public schools. The only part of the country with a significant educational presence was Chiloé, where the royalist government had overseen the establishment of many private schools run by religious orders. Despite a flurry of legislation and assertions of state responsibility for schooling, state control of, or even attention to, education was limited. Thus Encina (1940, 10:310) accurately described Chilean education as “a fireworks of laws, decrees, and measures which died before they touched reality or remained latent waiting for better times.”

Beginning with Manuel Bulnes’s administration (1841–1851), the development of education began in earnest, and throughout the second half of the nineteenth century, public education in Chile grew dramatically. This

tors, Chile seems more equal than many other Latin American countries. But accounts of rural life in nineteenth-century Chile suggest that economic and social inequality was very high. On the extent of rural economic inequality in Chile, see Bauer (1975). The social inequality and repressive labor relations that characterized most heavily indigenous regions of Latin America were absent in Chile, even in the heavily indigenous region of Araucanía. Education development in Araucanía lagged far behind that of the rest of the country, but (unlike the regional policy variation Mariscal and Sokoloff describe in Mexico) the Chilean state sought to implement the same schooling policies in that region as elsewhere in the country after incorporation in the 1880s (Serrano 1995–1996).

15. Labarca Huberton (1939) and Campos Harriet (1960) both provide classic histories of Chilean public education. A recent work that combines systematic evidence on the growth
growth, as reflected in the numbers of teachers, schools, and students, far outstripped demographic changes and represented a substantial increase in the reach of the state into society. Figure 1 shows the relevant trends, tracing the increase in schools and in enrollment from 1853 to 1910.\textsuperscript{16} The increase in both of these metrics reflects real growth, as significant progress was made even accounting for population growth. The proportion of the school-age population enrolled in school approximately doubled over the second half of the nineteenth century.

This national-level analysis might conceal a large disparity between urban and rural school provision. Even as the overall number of schools in the country grew, Education Ministry officials were very much aware of the urban bias of schools and sought to address it (MIP 1868, 42). To estimate the relative growth of education in rural areas of Chile, I compare the school provision at the department level over time.\textsuperscript{17} I find that schooling per capita increased over time in nearly every department between 1874 and 1909, and that the unweighted average of schools per one thousand residents in eighty-one departments rose from 0.6 to 0.9, a 50 percent increase (the difference in means is statistically significant at \( p < .05 \)). This is strong evidence that growing school provision in Chile was truly national, as the number of schools (as well as per capita school enrollment) increased even in departments with small, mainly rural populations.\textsuperscript{18}

By the end of the nineteenth century even small towns had public primary schools.\textsuperscript{19} The ability of the state to control the form, content, and context of primary education throughout the country developed at the

\textsuperscript{16} of schooling with careful historical analysis is that of Egaña Baraona (2000). This article covers broad trends across the nineteenth century more completely than the focus on the decades of the 1850s and 1880s in her work.

\textsuperscript{17} Attendance was far from universal throughout this period, but it tracked enrollment quite consistently. Thus, although Figure 1 contains data only on enrollment, the trend for attendance looks quite similar. The trend line for the number of schools underestimates the growth of education provision, as it does not show an increase when single-gender schools were converted into mixed-gender schools to save the expense of opening additional schools, a common practice in times of economic constraint (MIP 1877, 20).

\textsuperscript{18} Chile's largest subnational unit was the province. Many departments within each province were mainly rural, with insignificant towns as the seat of government. This analysis contains data on schools per one thousand residents for every department with available data for both 1874 and 1909. These years were chosen from the few with departmental education figures because both fall close to years of national census administration, which provides better estimates of population.

\textsuperscript{19} Even as schooling spread into small towns and rural villages over the late nineteenth century, the rural population that lived some distance even from these small communities continued to be excluded from access to schools until well into the twentieth century (Serrano 1995–1996, 462).

\textsuperscript{19} One exception to this nationwide development of education was the region of Araucanía in the south, which remained largely indigenous (Mapuche) and was not fully integrated into the Chilean state in formal terms until the 1880s (Serrano 1995–1996).
same time as the number of schools spread. Teacher training and textbook and curriculum standardization allowed the state to shape education throughout its national territory.

**Teacher Training**

In the early republican period, Chilean primary school teachers were often simply community members who had attended a few years of school themselves and could read and write. The lack of teachers, more than the lack of schools, was considered the limit to educational development (for examples of contemporary statements to this effect, see MIP 1869, 52; MIP 1871, 154). In response, the Ministry of Education established a series of state-run normal schools. Students received free tuition, room, and board, and graduates were required to serve seven years in Chilean public schools. Over the late nineteenth century, these teacher-training academies produced thousands of students.

The normal schools combined instruction in subjects to be taught at the primary school level with training in pedagogy. The government

20. Normal schools were established in the following cities at the following dates: for male teachers, Santiago 1842 (1844?), Chillán 1888, and Valdivia 1896; for female teachers, Santiago 1854, Concepción 1874, and La Serena 1890 (Anuario Estadístico [AE] 1890–1892, 315).

21. In addition, teachers were taught singing with the idea that “when they become teachers they will be able to propagate this powerful tool of civilization” (MIP 1877, 55).
undertook massive efforts to encourage graduates to take up positions at schools throughout the country. The minister of education repeatedly highlighted the difficulty in getting teachers to move to the northern mining provinces of Atacama and Coquimbo because of the high cost of living. Beginning in 1868, all normal school graduates teaching in these provinces received an annual subsidy of two hundred pesos to stay in their posts.\(^22\) In responding to the difficulty in getting teachers to move to the southern regions of Chiloé and Valdivia, which were considered more isolated from national life, the Education Ministry created scholarships at the normal schools earmarked for residents of these provinces, hoping that graduates would be likely to return home to teach (MIP 1868, 39).

Another problem the government faced was teacher retention, due to the low public school salaries (for a discussion of the possibility of introducing a new tax earmarked for teacher salaries, see, e.g., MIP 1868, 200; for discussions of the effects of low salaries on teacher retention, see MIP 1875, xxviii; MIP 1884, xcviii). In response, several salary increases were authorized over the late nineteenth century, and bonuses were given after six years of service (MIP 1875, xxviii). Despite these measures, many normal school graduates left public education after completing their seven years of mandatory service. One solution proposed, copied from the post-civil war United States, was an emphasis on training female teachers. The low wages that teachers received were less of a deterrent to women, who were less likely to find higher-paying jobs elsewhere. Although the retention of trained teachers continued to be a problem, the percentage of educators who were normal school graduates rose steadily.

In addition to training teachers in the normal schools, the government organized pedagogical instruction for existing teachers, beginning with the Congreso Nacional Pedagógico of 1889.\(^23\) Participants were asked to submit papers for discussion on a series of topics, with the best paper in each category to be awarded a cash prize. Topics included: “Project for a Plan of Study Appropriate for Chile” and “The Best Way to Teach National History in Primary Schools, from the Point of View of the Formation of the Character of the Child and His Preparation for Civic Life” (MIP 1889, 328–334.). The documents submitted for the conference were published in a single volume, which was distributed to all schools in the country.

Through this variety of measures, the Chilean educational bureaucracy sought to improve teacher quality. Most important, it created a system of pedagogical academies that produced a corps of teachers instilled with

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22. All currency data is in nominal Chilean pesos.
23. The idea was first discussed in the 1854 education law, which called for all teachers to gather annually in January for educational conferences to be chaired by the provincial inspector (AE 1848–1858, 130). It is unclear whether these regional conferences were held before 1889.
identical methods and rubrics of education. Every classroom directed by these normal school graduates was one that the central state had penetrated, and the teachers carried the state’s ideas of civilization and progress into the whole of the Chilean territory.24

Textbooks and Curriculum Content

In addition to teacher quality, officials saw the lack of materials available in many schools as a limitation to educational development.25 In response, the state began to produce and distribute textbooks, and to import and distribute furnishings and other materials.26 Along with this standardization came an effort to standardize curriculum and classroom instruction. As these became centralized, state control over the classroom increased (for ample exploration of the standardization of the classroom and its role in the disciplinary dimension of Chilean education, see Egaña Baraona 2000). Centralized textbook distribution began with an 1853 decree calling for free distribution to schools in each province. By 1860, hundreds of thousands of texts were printed and distributed to the provinces, providing between four and eleven books per school attendee over the course of the 1860s.27 The Education Ministry began to pressure teachers to opt for government distributed texts. This pressure culminated in a clause in the 1899 education law requiring that primary schools use only texts provided by the government (MIP 1899, 333).28

24. In addition to serving as agents of state penetration of society (Weber 1976), teachers shape the extent of implementation of the state’s visions of schooling (Vaughan 1997; vom Hau 2008).

25. For example, Egaña Baraona (2000, 142) cites the inspector for Chiloé, who wrote in 1858 that “los ramos de gramática castellana, de catecismo, de geografía, de dibujo lineal no se enseñan en un número mayor de escuelas por falta absoluta de testos, de mapas, de láminas. Los silabarios y libros de lectura escasean . . .”

26. Beginning in 1877 (MIP 1877, 35), the Education Ministry issued national contracts through sealed-bid auctions for school materials including classroom furnishings, paper, and ink. A system of warehouses throughout the country was established for the materials. In addition to the economies of scale and monetary savings, the centralization of provision gave the central state a means of ensuring that the materials were distributed in accordance with its priorities.

27. This figure is based on my calculations from province-level data on school attendance and textbook distribution.

28. In addition to distributing texts, the state was also increasingly involved in overseeing their content. Woll (1975) traces the history of state intervention in the production of history texts, and the state was also strategic in choosing texts for reading instruction. In 1899, five thousand copies of La Araucana were distributed to schools as a text for reading instruction—the choice of this text, though defended in Ministry of Education documents as “a model poem of well-spoken Spanish” (MIP 1899, 360–361) reveals the aspirations of state leaders to use the school system they had built to inculcate schoolchildren with nationalist values.
Efforts to shape public primary education also involved standardization of curriculum content. The state mandated a specific curriculum with the goal of shaping young Chileans' images of self, community, and country. The primary school curriculum included vocational training, required instruction in history (religious, global, American, and Chilean), and military exercises for male students. The details of curriculum requirements varied over time, but it is clear that by century's end it was standardized throughout the country. An illustration of this can be seen in the report from the visitador extraordinario in Aconcagua in 1896, which lists each lesson observed with the subject matter covered. The curriculum was followed so closely that the inspector was given a form to fill out that listed the subject being offered at the particular hour of the observation, the theme of the particular lesson, and whether the methods used for each subject and type of material matched those mandated by the central state (MIP 1896, 351). Clearly a state that is able to know what is being taught (and how that instruction is organized) in each classroom in the country on any given day is one with effective control over primary education throughout the national territory.29

INSPECTION AND OVERSIGHT IN PUBLIC PRIMARY SCHOOLS

The success of efforts to standardize and control education throughout the national territory, as the preceding discussion of curriculum suggests, depended on the ability of the central state to inspect and oversee education in practice. In its early years, inspection had only limited effectiveness and was the site of significant conflict. But inspection became firmly centralized and professionalized after the 1870s, and it was much more effective after this time. Beyond the original intent of ensuring the consistent quality of primary education, inspection also entailed the compilation of statistics about schools and their performance (on this point, see Egaña Baraona 2000, 225–226). In overseeing teachers' activities, highlighting their deviations from Education Ministry mandates, and collecting data on their performance to send to Santiago, educational inspectors played a significant role in increasing the Chilean state's control over schools.

Although the 1833 constitution had created the Superintendencia de Educación Pública, charged with inspecting education throughout the country and reporting to the national government, little effective oversight was exercised for the subsequent decade. The inspection of schools

29. Efforts to standardize the classroom experience also included regulations governing the design of school buildings, as Egaña Baraona (2000) discusses in detail. For example, an 1871 reglamento required all classrooms to display, in a manner visible to all students at all times, a crucifix, a clock, and maps of the world, the Americas, and Chile (MIP 1871, 166–167).
began in earnest with the foundation of the Universidad de Chile in 1842, which, consistent with Bello's vision of the role of the national university, oversaw educational development (on school inspection under the aegis of the Universidad de Chile, see Jaksic and Serrano 1990; Serrano 1993). The 1854 education law charged inspectors with reporting at least once every three months to the central office on the schools they had visited and presenting an annual report on the state of schools and instruction in their jurisdiction. Early oversight was difficult because a single inspector had to cover all schools in one or more provinces, and the state's fiscal difficulties limited efforts to increase the number of inspectors.

In 1868, commissions of local notables were established in each province to oversee schools (MIP 1868, 40). Although these local commissions were expected to be an important impetus for the systematization of public education, the lack of knowledge and interest on the part of local notables in many towns limited their effectiveness. As discussed in more detail subsequently, the inspection system was the subject of prolonged debate in the mid-1870s, as local officials, the central bureaucracy, and regional officials puzzled over how to increase its effectiveness. In the end, the central bureaucracy took firm control of the inspection system and, over the course of the late 1870s, systematized it to a significant extent. This outcome, as I will demonstrate, provides an opportunity to explore the roots of state oversight and control, as it represents a qualitative and discrete increase in the intensity of state penetration of the arena of education.

The degree of systematization eventually achieved can be seen in the instructions to inspectors from the Education Ministry. An example from the province of Atacama in 1884 orders the inspector to arrive in the department of Vallenar on April 1 and to spend 25 days inspecting schools, leaving to arrive by May 1 in the department of Freirina, where school inspection was to last until June 4. A second and third visit was to be conducted in Vallenar (June 20–July 14, September 8–October 2) and in Freirina (July 20–August 23, October 8–November 11) (MIP 1884, 125–127). The inspector was to report to the Santiago office before and after each visit in each department. During each visit, he was to spend at least one school day in each public school. All the relevant data was to be collected on forms sent from the Santiago office, which were to be returned after each visit. Under this newly systematized inspection regime, schools in thirty-two departments saw three inspections during 1883, while thirty-three others saw two visits. At this time, only twelve public schools remained un inspected: two in the colony of Punta Arenas and ten in territory seized during the recently ended War of the Pacific.

Article 11 of the education law of 1860 required inspectors to oversee private and public schools. Private schools were to be observed "in terms of the morality and order which they should maintain" but "not in terms of the instruction which they offer" (MIP 1884, cvii and 72, quoting article 11
of the education law of November 24, 1860). Inspecting private schools remained difficult because they could open without filing any paperwork or claim to be secondary schools and thus exempt from inspection (MIP 1884, 72). But over time, oversight of primary schools intensified. This more limited inspection of private schools nevertheless brought the state into their classrooms at least once per year and ensured that the schools obeyed a variety of edicts.

In addition to the systematic inspection of schools, efforts were made to oversee the inspectors' work using complementary oversight processes. The *memorias* of provincial intendants and departmental governors from the late nineteenth century often include a discussion of the schools in the jurisdiction. The discussions draw on the reports of inspectors but often are derived from other sources, including personal visits by the authority to the schools in the territory he oversaw. Reports vary widely in their assessment of the inspection system itself, ranging from glowing accounts to diatribes on the ineffectiveness of the inspectors assigned to a region. Thus, Santiago received feedback on the effectiveness of inspection even as it maintained strongly centralized control over it, allowing the system to be fine-tuned as needed.

The number of inspectors rose from six in 1854 to thirty-one in 1893. Their duties became regimented and they became more professionalized, as indicated by increased salaries, increased requirements for the job, and a policy of rotation through different regions (MIP 1869, 192). The inspection system was responsible for the oversight of the entire effort by the Chilean state to expand and systematize education. It was considered an "indispensable condition for the regular progress of schools" (MIP 1869, 53). As the coverage of inspectors increased in scope and intensity, their reports represented the extent of state penetration of the Chilean elementary classroom and the increased infrastructural power of the Chilean state.

**THE ORIGINS OF EDUCATIONAL DEVELOPMENT:**
**THE CASE OF SCHOOL INSPECTIONS**

Over all, the second half of the nineteenth century saw a dramatic and qualitative increase in the systematization of public primary education in Chile. Over this time, teachers became more professionalized, and the curricula and texts used were standardized. Most fundamentally, the increasing intensity of inspection and oversight ensured that policy developed in Santiago was put into practice in schools throughout the country. This meant that the increasing provision of education from Arica to Punta Arenas truly reflected an expansion of a systematized and national primary education system.

Explanations for this change in Chile have focused on several factors: most prominently, the role of individual leaders and the broad elite con-
sensus about education among its political elites, Chile’s homogeneity relative to its neighbors, and societal demands for education. While these factors all play a significant role in educational development, an examination of the origins of school inspection reveals another central factor: the actions of Chilean bureaucrats in pursuing the development of an effective system of oversight of schools in the communities in which they served. Inspection represented the backbone of state-controlled primary schooling.

This section shows how local state agents played a crucial role in the development of inspection by focusing on a fundamental moment in inspection development in the 1870s. We cannot understand the growing systematization of Chilean primary education, or its nationwide spread, without taking into account the role played by local bureaucrats in pressing the state for more effective oversight of schooling. After showing that these officials were central to educational development, I outline an explanation for their motivations. I show that their place in the institutions of local rule in Chile—their relationships with central state agencies in Santiago and with the communities where they served—created incentives for their efforts to promote educational development and the increased reach of the state into their communities.

In the late 1860s, national education officials expressed repeated concern about the fact that the system relied on a few inspectors who had huge territories to cover. In 1869, the minister of education wrote: “One single man in each province can never suffice for such a wide range of responsibilities, and in all provinces the lack of oversight is every day more clear. With one or two visits per year it is completely impossible for the inspector to form an approximate idea of the competency and work ethic of the teacher, nor to judge whether the method of instruction used is adequate and in concordance with those decreed” (MIP 1869, 53).

In response to these concerns, the Education Ministry decreed on June 3, 1868, the creation of commissions of local notables to oversee education. These emerged by 1871 in big cities such as Santiago and Valparaiso, in local centers such as Vallenar and Freirina in the north and Angeles and Ligua in the south, and in a few small towns, most notably in Chiloé, and efforts were made to create commissions in other communities (MIP 1871). The shortcoming inherent to these commissions, that their members were not necessarily knowledgeable about education or trained in evaluating its progress, quickly became evident. An 1869 visit by a special inspector to some of the provinces in the center of the country found that the only

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30. The role of local bureaucrats in educational development is one facet of their broader role in various aspects of the development of the state’s infrastructural power—its ability to penetrate society throughout the national territory and effectively implement policy (Soifer 2006).
local commission that was effective was that of Caupolicán—and it was no coincidence that this commission was also unique in being headed by the department governor (El Araucano 1869, 4).

Local bureaucrats who expressed concern about these commissions as a way to oversee education also highlighted these limitations on a regular basis. Their concerns revolved around two issues: (1) effective oversight of education and (2) disputes over who had the authority to hire and fire teachers. The complaints of local officials trickled up through the bureaucracy, and bureaucrats at the national level confronted evidence of the limitations of local commissions. The 1869 special inspector's report urged the bureaucrats in Santiago to rely more on the opinion of local officials, as the success of the project of educational development was "entirely in their hands" (El Araucano 1869, 2–3). By the mid-1870s it was generally acknowledged within the education bureaucracy that these commissions were a total failure (see, e.g., MIP 1875, 214).

The authority to hire and fire teachers was a significant bone of contention. The commissions of local notables were seen as overstepping their bounds by taking on this role, and in the context of their acknowledged ineffectiveness, this jurisdictional conflict turned the national bureaucracy against the inspections. In 1871, the inspector general sought legislation to limit the commissions to the "oversight and development" of education, but there was no evidence that the commissions would be up to these tasks, and the legislation was never put forward (MIP 1871). By the mid-1870s the government sought to establish a more effective system of oversight, but this effort was stymied for the remainder of the decade as a result of the severe economic crisis. This crisis saw the creation of a protector de escuela, a single overseer for each school (MIP 1877, 38–39) but this was a temporary measure during the time of penury.

As the economic crisis lessened during the War of the Pacific, pressures for the development of inspection mounted. The ministry was pressed by inspectors themselves to increase the number of inspectors and to equalize the number of schools each had to cover (MIP 1882, 127). By 1883, there were twenty-three inspectors, including one for the new territories of Antofagasta and Tarapacá, which had been taken from Bolivia and Peru during the War of the Pacific. At this point, the last local commissions were eliminated and school inspection turned over entirely to the professional inspectorate.

This brief account of the development of school inspection shows that local state agents challenged early decisions to rely on local commissions. The national bureaucracy was responsive to the complaints of local state agents, and it removed the power to inspect from local commissions. Although the government took temporary measures that put school inspection in local hands during a severe economic crisis in the mid-1870s, it was quick to seize on the economic recovery that accompanied the War of the
Pacific to put in place a professional inspectorate throughout the country and to increase its effective control over schools throughout the national territory, including the newly conquered regions of the north.

The criticisms of local state agents were effective in pressing the national government to professionalize the educational system. But why were local officials so concerned with the quality of inspection? Their statements of concern about the quality of education cannot be taken at face value, as these reflect their attempts to couch their demands in terms that they thought would appeal to their audience. Instead, we can hypothesize that two motives drove local officials to seek to increase the presence and power of the professional inspectorate. First, local state agents saw professional inspectors as allies in a project of educational development and the expansion of state control. Egàña Barona (2000, 235–238) shows that the two types of bureaucrats collaborated on raising funds for schools from citizens, and on increasing school attendance. Increasing the provision and quality of education was a way for state officials to satisfy the communities in which they served. State agents were besieged with demands for increased school provision and school quality, demands they passed on to the national bureaucracy, as reflected in the appearance of a subset of the demands in the memorias of regional and national officials. To provide schools and oversee the quality of education was a way to deliver concrete results to the communities in which they served, and although they were not accountable to the communities, local state agents' ability to provide services in response to their demands increased their legitimacy.

Second, local state agents saw educational development as a means of inculcating the youth of their district with national identity and civilization. Local officials were so interested in educational development that they regularly took it upon themselves to regulate all aspects of schools within their jurisdictions, and they had to be restrained by the education law of 1883, which gave authority over local education to the inspectorate and limited local officials to appeals to the inspector general. The development of professional inspection was one front in a struggle for increased state presence in society, state presence that local officials sought because it would transform society in ways that increased their control.

Thus, while the central education bureaucracy sought to maximize its control of education by pushing inspection outward from the capital, local state agents criticized the type of inspection first introduced. By arguing that local commissions were ineffective and overstepped their bounds, state agents convinced the Education Ministry of the need to reform the system. Had these agents not been so critical of the local commissions, they likely would have been retained. At the time, the priorities of the central education bureaucracy (as reflected in their memorias and budgets) were increasing the number of schools in underserved areas of the
country (mainly rural areas) and improving teacher quality. The pressures of local state agents placed regimentation of school inspection on the national agenda, and the transformation of the inspection system that resulted was fundamental in increasing state control of education. Tracing the development of educational inspection shows that economic factors alone cannot explain this growth of state control, though the recovery from economic crisis did allow funds for increased professionalization. It cannot be explained by the actions of officials in Santiago alone, as they made policy choices relying on and responding to the reports they received from the state agents in the periphery.

The local officials—prefects and subprefects, and education officials—were not elites from the communities in which they served. Instead, they were deployed from Santiago to represent the state in these communities. This meant that they needed both to win support from the community and to shape the communities in ways that would increase their control. Education was one of the fronts on which officials pushed for an expanded state role in their communities, and the ability of the Chilean state to penetrate and shape society on a national level through the school system developed broadly as a result of their efforts. In countries where these positions were delegated to local elites, on the other hand, efforts of the central state to implement liberal projects of social transformation foundered (Szuchman 1990, 135–136). Thus, the success of state efforts to develop Chilean schooling is due, to some extent, to the actions of local officials who pushed the central state to intensify and centralize the oversight of the country's schools.

CONCLUSION

The first finding of this article is commonly stated but rarely systematically explored: primary schooling in Chile both broadened and became more centrally organized over the second half of the nineteenth century. Evidence presented here shows that primary schools spread through the country and that many aspects of education became systematized. The linchpin of this series of changes was the expansion and professionalization of school inspection, which allowed the Chilean state a new degree of oversight and control.

In addition to describing this series of changes, the article has considered various explanations for the development of Chilean schooling. Considering the sources of both supply and demand for education, I offer a new contribution to the supply category. An examination of the development of school inspection showed that local officials played a crucial role. Because local state agents implemented the policies designed by state leaders in response to societal demands, the extent to which they cooperated in the implementation of policies designed in Santiago was fundamental in
explaining why Chilean schooling grew over the course of the nineteenth century. Thus, in addition to the demands of society and the attitudes of political elites toward education, scholars should consider the role of the intermediate bureaucracy in promoting the growth of schooling.

A bolder form of this argument, however, is that the promotion of educational development by local state agents—contingent on the relationships between those agents and the central state and communities in which they served—is the primary determinant of Chile’s striking educational development. This view would claim that because local officials in Chile were deployed from the capital, they sought to transform society in ways that increased their control over it by expanding the state’s infrastructural power—and one such transformation was the spread of education. In addition to the systematization of schooling, the nineteenth century saw the emergence of direct taxation, public health policy, and other ways in which the Chilean state was able to increase its authority over society. Local officials, deployed from the capital, were central in the effective implementation of this project of Chilean state leaders, a project whose effects have dramatically shaped Chile up to the present. The development of infrastructural power is perhaps the most fundamental factor separating Chile from many of its neighbors, and the systematization of primary public education is one aspect of that pivotal transformation.

REFERENCES


Anuario Estadístico de Chile various years Santiago: Dirección General de Estadística.

El Araucano 1869 March 23.


Coatsworth, John

Collier, Simon

Cruz, Nicolás

Egavin Baraona, Maria Loreto
2000 La educación primaria popular en el siglo XIX en Chile: Una práctica de política estatal. Santiago: Dirección de Bibliotecas, Archivos y Museos.

Encina, Francisco
1940 Historia de Chile desde la prehistoria hasta 1891. Santiago: Editorial Nascimiento.

Engerman, Stanley L., and Kenneth L. Sokoloff


Gootenberg, Paul

Labarca Hubertson, Amanda
1939 Historia de la enseñanza en Chile. Santiago: Universidad de Chile.

Mahoney, James

Mann, Michael

Mariscal, Elisa, and Kenneth L. Sokoloff

McEvoy, Carmen

Meltzer, Allan H., and F. Scott Richard

Ministerio de Justicia, Culto e Instrucción Pública
various years Memoria del Ministerio de Justicia, Culto e Instrucción Pública. Santiago: Ministerio de Justicia, Culto e Instrucción Pública.

Molina, Iván, and Steven Palmer

Newland, Carlos

Ortega Martínez, Luis
Sater, William F.  
Serrano, Sol  
1993 Universidad y nación: Chile en el siglo XIX. Santiago: Editorial Universitaria.  
Soifer, Hillel David  
Soifer, Hillel David, and Matthias vom Hau  
Szuchman, Mark D.  
Valenzuela, J. Samuel  
Vaughan, Mary Kay  
vom Hau, Matthias  
Weber, Eugen  
Woll, Allen  
Yeager, Gertrude M.  