The Education System of Argentina

Coping with the Past, Dealing with the Future

Felicitas Acosta and Victoria Rio

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Abstract

This chapter presents a description of the Argentinian educational system considering its historical configuration as well as its present-day challenges. The chapter is divided into three parts. The first one introduces an overview of the system's history with an emphasis on two different moments: foundational strands and massification. An analysis of those two moments in the face of the changes promoted by the reforms during the 1990s and 2000s closes this section.

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The second part covers a wide range of aspects related to the organization of the system. Starting from most recent changes, the section outlines a synthesized, yet thorough description of the system's main features related to government and administration, school structure, curriculum, private education, assessment, teacher training, ICTs, and higher education. Difficulties related to the central system are described for most of them.

Finally, the last part of the chapter refers to current issues mainly associated with the implementation of the National Education Law passed in 2006. Changes and continuities between past and present-day administrations are considered in order to provide an overview of the challenges still faced by the education system and the role played by the central state.

Keywords

Historical expansion · Federal organization · Inequality · Present challenges

1 Introduction

As the development of education systems in the West in the late nineteenth century and their expansion in the twentieth-century attest, the internationalization of schooling has historical roots (Tröhler and Lenz 2015). National governments played a crucial role in establishing and sustaining those systems (Tröhler et al. 2011). In this sense, Argentina's central state has a long-standing tradition in education due to the somewhat quick organization and expansion of its national education system between the last decades of the nineteenth century and the middle of the twentieth century. Since the late 1990s, the education system has undergone successive reforms whose results are currently under debate. Many of those reforms have sought to address the tension between access to schooling and quality learning outcomes.

In particular, during the last decade, the education policies undertaken by a center-left administration were based on a traditional device, mainly the passing of federal laws on education. The Argentinian administration from 2016 to 2019 had a different political bent, and it has quickly dismantled some of the previous government's most essential programs, even overriding some of the laws passed. The new policies seem inclined to adopt the global agenda wholesale. Therefore, the Argentinian education system faces old and new challenges in a scenario where local and global actors are reluctant to accept the idea of the state as the leading provider of education.

It is within this context that the chapter presents a description of the Argentinian education system considering its historical configuration as well as its present-day challenges. The chapter is divided into three parts. The first one introduces an overview of the system's history with an emphasis on two different moments: foundational strands and massification. An analysis of those two moments in the

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2 Historical and Social Foundations and Present Situation

Argentina, officially the Argentine Republic, is located in the Southern Cone. With a mainland area of 2,791,810 km^2 (INDEC), Argentina is the eighth-largest country in the world, the fourth largest in the Americas and the second in South America after Brazil. It is the largest Spanish-speaking nation. The State is subdivided into 23 provinces, and one autonomous city, Buenos Aires, which is the capital city. Both the provinces and the capital have their own constitutions, but exist under a federal system.

Argentina's Basic Data

Area: 3,761,274 km^2 of which 2,791,810 km^2 are part of the American Continent and 969,464 km^2 of the Antarctic Continent and southern islands

Division: 23 provinces and 1 federal district

Population: 40,117,096 (according to 2010 Census), 44,938,712 (2019 estimate)

Urban population: 91% (according to 2010 Census)

School-age population (3–17 years old): 24.6% (2016 estimate)

Indigenous peoples: 2.3% (according to 2010 Census)

Source: INDEC, www.indec.gob.ar and the document "Principales cifras del Sistema educativo nacional", DiNIEE, Ministerio de Educación y Deportes, May, 2017

Argentina has a long tradition in education due to the rather quick organization and expansion of its national educational system between the last decades of the nineteenth century and mid's of the twentieth. Since 2015, compulsory education covers 14 years from 4 to 18, theoretical age of completion of secondary education (Table 1).

Table 1 Equivalence between educational levels established by the National Education Law (Ley de Educación Nacional 26.206) and the International Standard Classification of Education* (1997). Compulsory education, Argentina, 2017

	Age																	
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
					Compulsory education														
Standardization	ISCED 0						ISCED 1						ISCED 2			ISCED 3			* **
Denomination (education law no. 26,206)	*Educación Inicial*						*Educación Primaria*						*Educación Secundaria (Ciclo Básico)*			*Educación Secundaria (Ciclo Orientado)*			*

Source: SITEAL based on the Ley de Educación Nacional No. 26.206, 2006, retrieved from http://www.sipi.siteal.org/normativas/12/ley-ndeg-262062006-ley-de-educacion-nacional as amended by Law no. 27,045, 2014, retrieved from http://servicios.infoleg.gob.ar/infolegInternet/anexos/240000-244999/240450/norma.htm and UIS UNESCO (Accessed 2019).

Note 1: In Argentina, compulsory education extends over 14 years. The extensions of Primary and Secondary Education (ISCED 1, 2 and 3) vary between 7 and 5 years and 6 and 6 years, respectively, according to the specific province (12 jurisdictions have a 6–6 structure and the other 12, a 7–5 one). In this chart, ages and equivalence with ISCED correspond to the 6–6 structure. *Technical education extends for 1 more year

Note 2: The International Standard Classification of Education of the UNESCO Statistics Institute (CINE 97) is the one used by SITEAL for standardizing the information resulting from the national household survey of Latin American countries

2.1 General Background

Argentina became a republic with a representative and federal system of government in 1853, the year when its Constitution was passed. Until 1810, the territory that currently makes up the Argentinian republic was part of the viceroyship of Río de la Plata under the rule of the Spanish Empire. After independence, a series of domestic struggles ensued, including a significant conflict between projects that favored a federalist organization and those that supported a centralization of power in the City of Buenos Aires.

Once that period had come to an end with the triumph of the centrists, a process of national organization began – a period known for the founding presidencies of three successive constitutional presidents: Bartolomé Mitre (from 1862 to 1868), Domingo Faustino Sarmiento (from 1868 to 1874), and Nicolás Avellaneda (from 1874 to 1880). During those years, the bases for the political, economic, and social organization of the republic were laid, though there was ongoing political instability and conflict between the provinces and the central government.

For approximately 50 years (starting in 1880 until at least 1916), Argentina as a country was constructed according to the interests of the sectors, that held power continuously during that period. Argentina had an agro-export economy and its institutional organization was based on a classic liberal ideology. The legislative bases, on which the nation was built, were established at this time, as was the modality for central state intervention throughout the country's territory.

It is during this period and in this context that the basic organization of the Argentinian educational system took place. This process can be seen as part of a larger one occurring in a number of Western countries at the end of the nineteenth century and beginning of the twentieth century, a process through which national educational systems were formed.

After the economic crisis of the 1930s and mainly the 1940s, the productive profile of Argentina altered as the country deepened nonagrarian industrial sector. Major advances in the living conditions for much of the population – as well as violent interruptions in the country's democratic political system – accompanied this process, which continued until at least 1976, when the last military coup took place. During the process of industrialization and in the context of the international economic crisis of the 1970s, Argentina's production and labor structures underwent profound changes. This had an impact on the steady increase in unemployment and poverty rates.

Institutional disruption came to an end in 1983, with the return to democracy under the administration of Raúl Alfonsín. His administration was marked by the recovery of the democratic institutions that had been suppressed during the last military dictatorship, although this process would be permanently threatened by political and economic crises. At the end of the decade and in the middle of a hyperinflation crisis, Alfonsín had to end his mandate before completing his full term. In the 1990s, new economic and political structural reforms were undertaken under Carlos Menem's administrations. Some of them tended to decentralize many of the national state educational and health provision systems. At the end of the

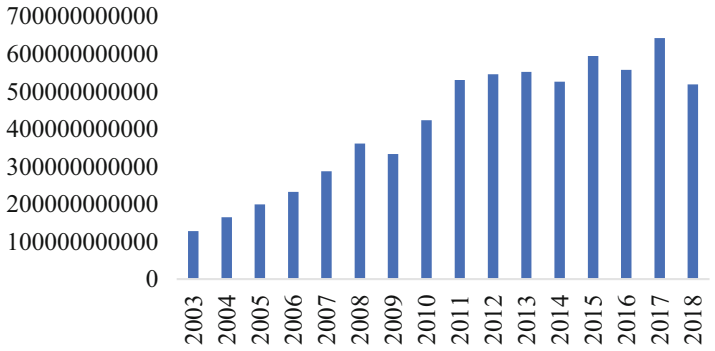

Fig. 1 GDP (USD at current prices) 2003–2018. (Source: Drawn up on the basis of Data of national accounts, World Bank and data files on national accounts, OCDE, https://datos.bancomundial.org)

decade, Argentina faced a new economic crisis that in 2001 sparked several demonstrations and eventually led to President De la Rúa's resignation.

Since 2003, but particularly since 2005, the country experienced an economic recovery that, with a mild interruption in 2008 and 2009 in the context of the international crisis, extended until 2011. Then Argentina's economy entered a new recession phase that has deepened since 2018 and 2019. The recovery during the past decade had an impact on several social areas such as the reduction of the poverty and unemployment rates that had increased dramatically in previous years, and the development of a number of social policies (Fig. 1).

During this period of recovery, especially since 2005, the government increased social expenditure significantly. In particular, and regarding education, some social protection policies were implemented to strengthen children's and young people's access to compulsory education. The universal allowance per child extends the monetary allowances given to formally employed workers mainly, to those family members who are unemployed or are household or informally employed (with an income below the minimum wage) workers with children up to 18 years old. It was implemented in 2009 and it consists of a cash transfer per child, with certain health- and education-related conditions. The PROGRESAR program, implemented in 2014, intends to support vulnerable students from 18 to 24 years old and consists of a cash transfer to encourage compulsory school completion, and the continuity of studies in higher education or professional training (Fig. 2).

All in all, some of the problems that had deepened in the last decades of the twentieth century remained and continued to manifest themselves in indexes of poverty, informal employment, and inequality (Figs. 3 and 4).

It was during the second half of the twentieth century that the Argentinian education system underwent a process of massification at all levels. While this process was in many ways similar to analogous processes in centralized countries, there were certain particularities.

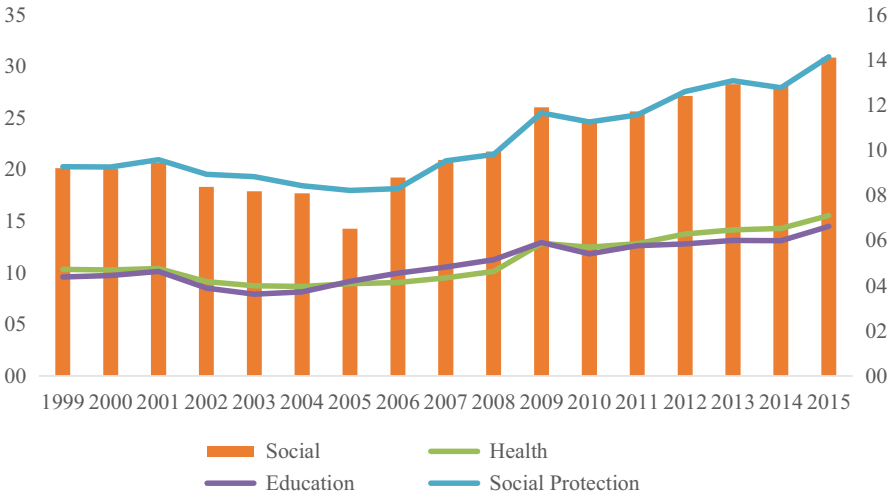

Fig. 2 Public expenditure as % of GDP. 1999–2015. (Source: Drawn up on the basis of BID 2017, Harmonised Household Surveys in Latin America and The Caribbean. Total social expenditure is shown on the left axis)

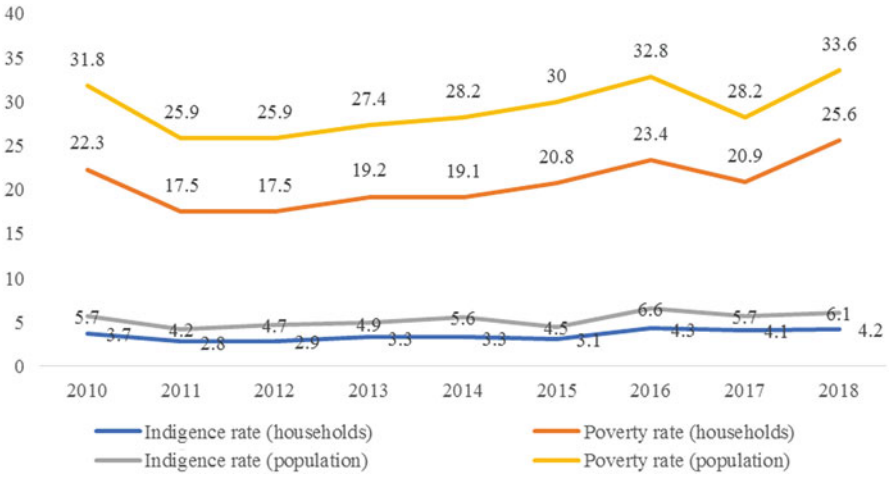

Fig. 3 Indigence and poverty rates measured by income. 2010–2018. (Source: Drawn up on the basis of "Pobreza monetaria y vulnerabilidad de derechos. Inequidades de las condicionesmateriales de vida en los hogares de la Argentina urbana (2010–2018)," retrieved from http://wadmin.uca.edu.ar/public/ckeditor/Observatorio%20Deuda%20Social/Documentos/2019/2019-OBSERVATORIO-DOC-ESTADISTICO-POBREZA-MONETARIA.pdf)

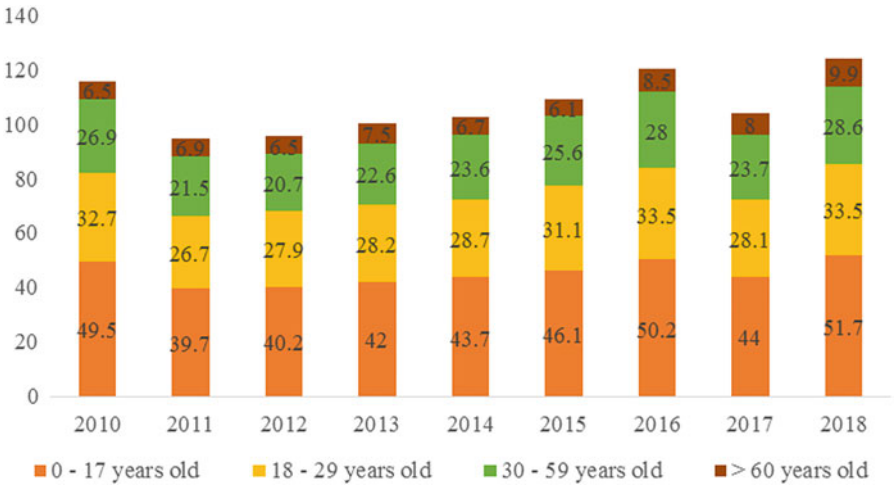

Fig. 4 Poverty rate per age group. 2010–2017. (Source: Drawn up on the basis of the "Monetary poverty and rights vulnerability. Inequity of material conditions of Argentina's urban households" report. Available at: http://wadmin.uca.edu.ar/public/ckeditor/Observatorio%20Deuda%20Social/Documentos/2019/2019-OBSERVATORIO-DOC-ESTADISTICO-POBREZA-MONETARIA.pdf)

2.2 Foundation and Expansion of the Educational System

This section presents the major events in the development of elementary, secondary, and higher education in Argentina. It provides an overview of each educational level's foundational moment together with the changes that took place during the massification period. In particular, a shift from a centrally governed system to a provincial one, and the expansion of secondary and higher levels together with the deepening of disparities and inequalities (Acosta & Marquina 2011).

2.2.1 Elementary School

Important precursors to the foundational period can be traced back to Buenos Aires mayoral administrations of Manuel Dorrego and Bernardino Rivadavia during the first third of the nineteenth century. Those administrations started to pay attention to the development of "first letter" (elementary or primary) schools. Also during this period the second university was founded in the country: the University of Buenos Aires (the first one, the University of Córdoba, had been founded in the seventeenth century). Those modest early advances and intense debates on teaching were however short-lived. It was not until 1860, with the beginning of the constitutional period, that they re-emerged.

Central to this later process was the figure of Domingo Faustino Sarmiento, who, after intense experiences regarding schooling on the East Coast of the United States, held a number of different positions in the executive branch. He fostered the reorganization of the Ministry of Education, the creation of the first teacher training high school – the *Escuela Normal de Paraná* – the creation of kindergartens,

prolonged visits of teachers from the United States in order to further elementary school teaching in the provinces, the founding of community libraries, and the law that provided for the organization of elementary education in Buenos Aires province.

During the administration of Julio Argentino Roca (1880–1886), and after an intense parliamentary debate between classic liberal sectors and sectors representing the Catholic Church, Law 1420 was passed in 1884. That law established mandatory, free, and secular elementary-level education in the City of Buenos Aires and the national territories. The national government also took control of the education system through the creation of the National Educational Council, whose members were appointed by the executive branch. National control over education would later be reinforced in 1905 with Law 4874, known as the Lainez law, which authorized the federal government to create schools in provinces that requested so.

At that moment, the Argentinian elementary school assumed a modern, multi-level, or graded format organized around the notion of simultaneous teaching. Administering the education system became a pillar of the centralized government, and the autonomy of schools was limited. Starting in the last third of the nineteenth century, enrolment expanded noticeably. By 1914, almost half of the school-aged children were enrolled in elementary school. By the second half of the twentieth century, that figure would rise to more than 80%.

Elementary school became an almost universal experience for Argentinian children, though by the 1980s there were signs that some problems had arisen. First grade retention, difficulties to graduate from elementary school to enter high school, the split between public and private schools as well as within public elementary schools, all became more frequent issues.

2.2.2 Secondary Education

The organization of secondary education in Argentina also partakes of the configuration of Western national education systems and their contexts. Starting in 1860, the nature of this segment of the future education system was clearly and decisively defined.

The origin of secondary education in Argentina began with the creation of "national high schools" during the second half of the nineteenth century. National high schools were responsible for training the ruling class and preparing their students for the university. These institutions were selective and the content of their curricula humanistic. Since the very beginning, this model of high school education has been prestigious at the social level.

Throughout the twentieth century, secondary education expanded consistently. This process entailed, firstly, an increase in the number of national high schools and, secondly, the creation of other educational modalities such as programs based on technical or commercial education. In 1863, the *Colegio Nacional de Buenos Aires* (the Buenos Aires national high school) was created by decree by Mitre's administration. It was defined as a seat for preparatory education in the sciences where literature, humanities, moral sciences, physics, and mathematics would be studied. In 1864, "national high schools" were created in Catamarca, Tucumán, Mendoza, San Juan, and Salta; their curricula mirrored that of the *Colegio Nacional de Buenos*

Aires. Starting in the late nineteenth century, a number of teacher training schools were also created. While the training at these institutions was similar to that of other national high schools, their curricula were geared towards training would-be teachers.

The first two of Peron's administrations (1946–1955) saw a major expansion in technical education. In 1948, there were 128 technical high schools, and in 1958 there were 775. During the same period, enrolment went from 21,016 students to 146,258. Similarly, during those years the number of national high schools also grew rapidly; their enrolment doubled (46,997 in 1941 versus 110,755 in 1955), and so did the number of existing institutions (from 237 in 1941 to 458 in 1955).

While this increase in enrolment has continued over time, it was particularly dramatic in the 1950s and 1960s (from 1947 to 1955, enrolment went from 177,912 students to 455,250) and from the mid-1980s to the late 1990s (the rate of school attendance among young people aged 13–17 went from 38.8% in 1980 to 68.5% in 2000).

One of the main problems with the expansion of secondary education is that, at the institutional and curricular levels, such education has historically been based on a relatively stable humanities-centered model whose main characteristics are rigid formal logics, unvaried scheduling, a curriculum divided into different disciplines, and teachers hired according to hours of class time. This model has proven incapable of maintaining these high levels of enrolment (Acosta 2012).

Indeed, since the beginning of secondary education in Argentina, this significant rate of enrolment has been accompanied by a high dropout rate. Tedesco (1986) points out that during the 1886–1891 period, the dropout rate at national high schools was 68%. More recent studies place the graduation rate in 1950 at 50% (see Giuliodori et al. 2004). This rate peaked in the 1960s when almost 70% of enrolled students graduated. It plummeted in the 1980s and then leveled off at around 40% in the 1990s. Currently, after the major increase in enrolment in the 1990s, only five out of ten students that start secondary education eventually graduate (Acosta 2012). It should be noted that in the 1990s the Education Law extended compulsory schooling from 7 to 10 years, therefore extending elementary school by two years, which resulted positively in increasing years of enrollment in ISCED 2.

2.2.3 Higher Education

As indicated above, there were few universities in Argentina during the nineteenth century, though Law 1597 passed in 1885 – known as the Avellaneda law – would provide the framework for the development of the university model until, at least, the university reform of 1918. Universities at that time offered programs in traditional fields. They were legally bound to the executive branch, though the aforementioned student-driven reform would attempt to modify that state of affairs.

Nonetheless, political meddling in universities would be a constant in university life in Argentina until 1983, when the most recent military dictatorship came to an end. In the mid-twentieth century, during the first two of Peron's administrations and even later, there were major changes in the university system. In 1949, an open-

access free of charge university model was instituted. This would change again during the military governments, but it was undoubtedly largely responsible for a leap in enrolment of more than 180% from 1947 to 1955.

In addition, in 1948 the university model and its institutions underwent a change through the creation of the *Universidad Obrera Nacional* (a national working class university), geared towards training a new class of professionals in the field of engineering, holders of a degree in "factory engineering." Classes started in March 1953, with seats in Buenos Aires, Córdoba, Rosario, Mendoza, and Santa Fe. After Perón was overthrown, in 1959 the *Universidad Obrera Nacional* became what is now the *Universidad Tecnológica Nacional*.

The 1960s are considered the golden age of the public university due to the quality of its professors and curricula. That decade also saw the creation of two additional nationally run regional universities and, amidst considerable public debate, the growth of private university education. Nonetheless, not until the first years of the 1970s did the university panorama truly diversify thanks to the creation of nationally run universities, which added up to 26 (until the beginning of the 1970s, there had only been ten national universities) (CONEAU 2012). This, in turn, meant a tripling of the number of students from 1955 to 1973.

The military coup in 1976 initially led to stagnation and then a fall in university enrolment. This changed when democracy and the principles of joint student governance and open competition among candidates for senior teaching positions were restored. From 1984 to 1990, the number of students enrolled in universities grew sharply (65%, an increase from 443,400 students in 1984 to 679,400 in 1990).

The most recent law on higher education, Law 24,521, was passed in 1995. It is the first rule seeking to regulate universities and other nonuniversity higher education institutions, mostly teacher training institutes, thus giving shape to a system of higher education at large. During this period, new universities were founded, especially in the outskirts of Buenos Aires, some of which attempted to expand professional options and to modify the organizational structures of traditional universities. In 1996, there were 40 state universities, mostly nationally run, and 44 private ones (CONEAU 2012) (Fig. 5).

2.3 An Overview in the Face of the Changes of the 1990s

Both the founding and massification of the Argentinian education system prove its primary characteristics: organization by a centralized state, minimal coordination between levels, a significant capacity to expand, and trouble implementing institutional changes to address dropout rates.

Recurring economic crises since the 1970s, including the one that took place in 2001, have increased poverty among the population, leaving a mark on educational systems and their aforementioned structural problems. The most significant of these problems involves increased educational segregation as well as "deterioration" in the quality of education.

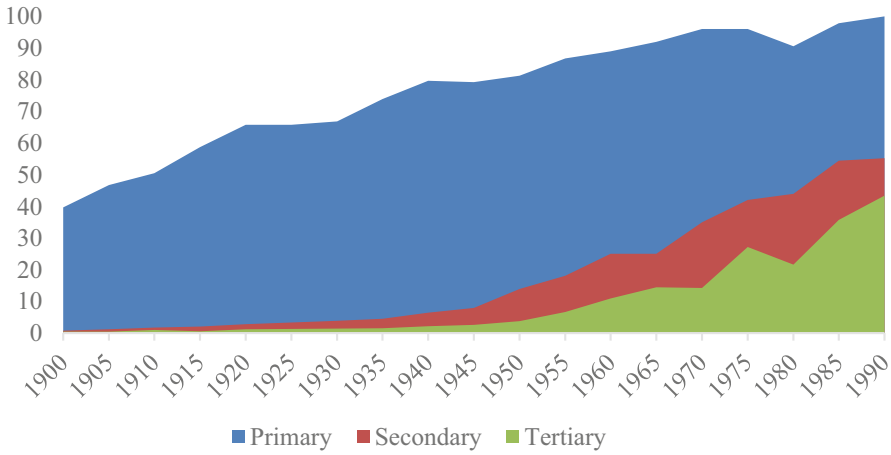

Fig. 5 Estimate enrolment ratios by level. 1900–1995. (Source: Drawn up on the basis of Lee, J.W. & H., Lee v.1.0, Jan 2016, Lee and Lee long-run education dataset, accessed on November 2019: http://www.barrolee.com/. * Lee and Lee use "adjusted enrolment ratios Based on "the ratio of all persons enrolled in a given level of schooling to the population within a specific age bracket, which is consistent across all countries," except for tertiary education in which they use unadjusted gross enrolment ratios (Lee and Lee 2016: 148–149). Historical enrolment ratios are Based on different sources such as UNESCO's world survey and other sources Based on surveys and census (Lee and Lee 2016))

Both the structural problems and these new challenges have been affected by the educational reform of the 1990s. Though the origin of this reform lies in previous military dictatorships, it culminated in the Federal Education Law passed in 1993. That law, which was passed in the context of a neoliberal government, faced some of the problems of the education system mentioned above, such as:

- A system without overriding regulations and norms geared towards cohesion. Until the passing of the Federal Education Law, elementary school education was regulated by Law 1420 passed in 1884 and provincial laws. Though affected by a number of rulings and interventions, university education was largely determined by the Avellaneda Law, passed in 1885. High school education was regulated by specific measures. The Federal Education Law aimed to coordinate the three levels.
- A centralized state-run system dominated by bureaucracy and its rationales. The decentralization in education started in the 1960s and 1970s and, once effected in the 1990s, it released the centralized national government of its financial responsibilities regarding education on all levels (elementary, high school, and non-university higher education) in order to foster "autonomy." This reform, however, reproduced the pattern of centralized organization within each of the provinces.
- A mass education system capable of growing: elementary school enrolment leveled out fairly quickly, and enrolment in high schools and institutions of higher

education grew throughout the twentieth century. Supported by a brief period of greater investment in education from 1993 to 1998, this situation intensified in the 1990s.

- A mass education system that has trouble retaining its student body, especially at the secondary school and higher education levels. The Federal Education Law modified the structure of the education system, especially at the high school level, by creating intermediate cycles and new curricular modalities that attempt to change the "expulsive" school. The implementation of the law has led to institutional changes that favor the diversity of the system, interrupt traditions, generate an identity crisis among teachers, and fail to resolve the problems facing these levels of education (such as the high dropout rate).
- The fragmentation of the education system and growing disparities in terms of quality. For reasons both integral and external to the system, these phenomena were already in the works in the 1980s – the reform in the 1990s only seems to have aggravated them.

The economic and political crisis that seized the country in 2001 marked the beginning of a new chapter in both the history of the country and its education system. The section on the current legislation governing the system allows for an analysis of whether this stage represents a break from or a continuation of those earlier moments.

2.4 A New Period of Reforms

The decade of 2000 witnessed a new period of educational reforms, and within this framework, the current legislation was passed. A common characteristic of these laws was that, from an official perspective, they aimed to "fix" some of the policies developed in the past decade (Caderosso and Schoo 2011). First, in 2005 the Argentinian Congress passed the Technical and Professional Education Law, which sought to reorganize and restructure hierarchically this offer at the secondary and higher levels as well as within the professional training circuit. It should be noted that the previous reforms had eliminated the technical track at the secondary level (although some of those certificates had some kind of continuity by linking general education with technical and professional programs).

The Education Funding Law was also passed that year. This legislation established several aims in terms of financial growth. In particular, it set the objective to increase education, science, and technology spending to 6% of GDP (Bezem et al. 2014). It also introduced some new forms of coordination between the different levels of governance, since the previous reforms had tended progressively to federalize the education system (Morduchowicz 2014). Finally, it established mechanisms, together with further legal instruments, in order to agree on a bottom line for diversified teachers' salaries and working conditions (due to the federal structure), and introduced the collective bargaining institution between the federal government and the representative national unions (Claus and Sánchez 2019). According to some

specialists, however, some of the financial instruments provided for by the Education Funding Law and by further regulations are limited in protecting spending goals regardless of economic volatility (Claus and Sánchez 2019).

Finally, in 2006 Congress passed the National Education Law, which ratified some of the policies developed in the previous years to regulate the whole education system. Among some of the main reforms, compulsory education was extended from 10 to 13 years, until the completion of upper secondary school. In 2014, compulsory education was extended to 14 years as preschool at the age of 4 was established as mandatory.

Regarding higher education, the law passed in the 1990s was not changed but some of its provisions were modified in 2015 in order to guarantee unrestricted free access to universities. Also, since 2005 new universities have been created, most of them in the outskirts of Buenos Aires city. By 2016, Argentina had 131 universities (strictly, 111 universities and 20 university institutions), of which 66 were state-run, 63 private, and 2 foreign and international (available at: estadisticasuniversitarias.me.gov.ar, accessed on November 2019).

After this period of compulsory education extension, system expansion, and reforms, secondary school net enrolment rate ascended from 52.78% in 1993 to 86.63% in 2014, according to IIPE-UNESCO/OEI based on the permanent household survey. In the same period, the percentage of population of age 20 or more with a secondary school degree went from 17.14% to 24.29%. Also, according to the same source, the percentage of population 25 years old or more with a higher education degree also ascended from 11.68% in 1998 to 20.16% in 2014 (IIPE-UNESCO/OEI, available at: http://archivo.siteal.iipe.unesco.org/, accessed on November 2019).

The following sections detail some of the main regulations and characteristics of the Argentinian education system in the present and analyze some of its trends and current challenges.

3 Institutional and Organizational Principles

3.1 General Principles

The Argentinian education system was developed earlier than in other Latin American countries. With its origin in central administration, it evolved since the first Education Law in 1884, which established compulsory free secular primary education. Even though secondary education did not have any specific regulation until 1993, it was also organized during the last decades of the nineteenth century with the creation of *colegios nacionales* (national high schools) all over the country. Other offers such as Teacher Training schools and Industrial and Commercial schools followed later on.

Enrolment had a continuous growth throughout the twentieth century with periods of particular increase in the 1950s and the 1980s. The absence of any specific legislation that regulated secondary school together with the evolution of enrolment

especially at that level led to the passing of a new Education Law in the 1990s and a series of reforms which altered the traditional structure of the system. However, failures in the implementation of these reforms, among other factors, led to a new period of reforms and the passing of the current legislation.

At present, the system is organized under the National Education Law, the Education Funding Law, the Technical and Professional Education Law, and the Higher Education Law. This legislation applies to the entire national territory. While each province must pass its own specific legislation, the Federal Education Council is in charge of the coordination and agreement on general matters of the education system.

Regarding the system's structure, the current legislation establishes four educational levels: preprimary, primary and secondary school, and higher education. Furthermore, it defines 14 years of compulsory education starting from preschool at the age of 4 until the end of secondary school. Finally, it allows each province to choose between two possible structures: either 6 years of primary school and 6 years of secondary education, or 7 and 5 years, respectively.

In relation to its financing, it should be noted that after a period of substantial disinvestment due to the economic crisis that unfolded in the second half of the 1990s and exploded in 2001, expenditure on education recovered progressively until 2011 and, after a year of renewed growth in 2015, it contracted again during the administration of the period 2016–2019. It is to note, however, that structural historical problems related to students' trajectories at secondary school remained and led to high rates of repeaters, early school leaving, and over-age students. Table 2 shows some of the main indicators of the system.

A special comment must be made on private education. Although it has its origins in the foundations of the system, there were a series of changes in terms of both its regulation and enrolment growth in the second half of the twentieth century. Regarding the first issue, the government started implementing a subsidy policy to partially finance private schools (through the contribution to teachers' salaries) (Ruiz 2012) in the 1940s. Later on, in the 1960s, a policy of deregulation of private education was implemented. Some of those changes were incorporated in the Federal Education Law in the 1990s together with the provision that all education in Argentina should be public while administration could be state-run or private. The National Education Law passed in 2006 maintains much of those regulations. It allows denominational institutions, social organizations, cooperatives, unions, foundations, companies, and physical persons to offer private education (Ruiz 2016), under state authorization and supervision. This law also regulates general criteria for private institutions to receive state subsidies – although according to specific literature such criteria may be subject to the education authorities' political will (Narodowski and Moschetti 2015).

According to Sleiman (2018), in 2016, 12.4% of education spending represented state transfers to private education. However, this was not distributed evenly among the different provinces: while some provinces transferred around 20% of their spending, in others, this percentage did not reach 5 p.p. Another interesting issue is the difference between the percentages of denominational and secular schools that

receive subsidies. Again, according to Sleiman (2018), while both at primary and secondary levels 70% and 77%, respectively, of all private schools receive some type of state subsidies, when analyzed in detail, this percentage is bigger among denominational schools (74% and 80%, respectively) than among secular ones (63% and 70%). It is important to note that of all private schools, denominational ones represent 63% at the primary level and 81% at the secondary level.

Regarding enrolment growth, an upward trend was initiated in the 1960s, especially in primary schools, among which the percentage of students attending private schools grew from 10.6% in 1960 to 17.3% in 1980 and 21% in 2001 (Rivas 2009). It is important to add that this occurred in a period of general expansion of education. In addition, enrolment in private institutions grew particularly since 2003. According to Narodowski and Moschetti (2015), the percentage of students attending private schools rose from 25% in 2003 to almost 30% in 2010 for common education (accompanied by a growth in state subsidies to the private sector, according to these authors). Feldfeber et al. (2018) show a similar evolution of enrolment, in this case for the whole system: from 24.7% in 2002 to 28.9% in 2016. All in all, as it is shown in Table 2, in 2017, private education represented no more than 33% of the total of students attending educational institutions at any of the system levels.

Finally, enrolment in private and state-run institutions is not evenly distributed among the different provinces of the country. As an example, between 2008 and 2016 the largest percentage could be found in Buenos Aires City, where more than the 50% of students attended private schools in 2016 (Feldfeber et al. 2018), while in other provinces this percentage descended to less than 15%. The percentages vary also according to the socioeconomic backgrounds of students. A study carried out by Gamallo (2011) concluded that in 2009, while 87% of students (5–17 years old) from lower income households attended state-run schools, 74% of students from the highest income households attended private institutions.

3.2 Education Administration and Governance

Briefly, in the second half of the twentieth century, Argentina shifted from a mainly nation-centered system to a provincial decentralized one (Paviglianiti 1988, 1995). As it was mentioned before, national primary institutions were transferred to the provincial administrations in the 1970s (although the process could be traced back to the 1960s) and secondary and nonuniversity higher national institutions were transferred in the 1990s. As part of this development, also in the 1970s, the national council (created in the nineteenth century) was replaced by a federal council (Paviglianiti 1995), which gained more relevance in the 1990s, in the context of an entirely decentralized system. This process involved a reorganization of the levels of education governance in Argentina as well (Ruiz 2016).

The process described was mainly based on financial arguments and motivations (Cetrángolo and Gatto 2002) and therefore was not accompanied by any specific budget to support the institutions that had been transferred and the implications of such transferences (Cetrángolo and Gatto 2002). Moreover, the tax co-participation

Table 2 Main indicators of the education system, 2019

Levels	Students (total)	Students (public education)	Students (private education)	Effective promotion rate (2018-2019)	Repeaters rate	Over-age rate	Inter annual school leavers rate	Graduation rate
Preprimary	1,851,601	264,901 (68.3%)	586,700 (31.6%)					
Primary	4,832,979	3,537,684 (73.2%)	1,295,295 (26.8%)	96.7%	2.83%	8.02%	0.49%	95%[a]
Secondary	3,866,041	2,738,539 (70.8%)	1,127,502 (29.2%)	81.25%	10.02%	29.09%	8.73%	54,1%[b]
Higher education	Non university: 980,020 University (2016):1,939,419	Non university: 668,997 (68. 3%) University: 1,519,797 (79%)	Non university: 311,023 (31. 7%) University: 419,622 (21%)					

Source: Annual survey by the Argentinian Ministerio de Educación, Cultura, Ciencia y Tecnología, and Annual Statistics by the Secretaría de Políticas Universitarias

[a]2014 data, obtained from "Principales cifras del sistema educativo nacional", a document by DiNIEE, Ministerio de Educación y Deportes, Presidencia de la Nación, retrieved from http://www.bnm.me.gov.ar/giga1/documentos/EL005678.pdf

[b]2018 data, obtained from "Evaluación de la educación secundaria en Argentina 2019", a document by Ministerio de Educación, Presidencia de la Nación, retrieved from https://back.argentina.gob.ar/sites/default/files/sintesis_de_datos_destacados_evaluacion_de_la_educacion_secundaria_en_argentina_2019pdf.pdf

scheme was not altered, which in turn, considering the very unequal financial capacities among provinces, tended to deepen the inequalities among the different provincial education expenditures (Rivas 2009). Although in the 1990s, and especially in the last decades, some policies were aimed at addressing this issue, the problem remains and has a direct impact on variations through provinces in terms of teachers' salaries as well as in general schooling conditions (Claus and Sánchez 2019).

According to legislation, provincial administrations are in charge of the education system within their territories (including preprimary, primary, secondary, and non-university higher institutions, since universities are mostly national and have autonomous and self-governing administrations). The central tier (the national government) is not directly in charge of any educational institution, though it has important powers – mainly, among others, to establish, in coordination with the federal council, the objectives and common basic syllabi for all levels of the education system and to organize and implement a national assessment. The federal council – which represents all 24 jurisdictional administrations, the national government, and the universities council – is in charge of the coordination of as well as reaching agreements on educational policy.

It should be pointed out that the Education Law passed in 2006 and several further regulations sought to introduce centralized instruments by either regulating some of the federal council resolutions as mandatory (Ruiz 2016), creating national bodies (such as the teacher training national institute), and strengthening existing ones (such as the technical education national institute).

Finally, it has been discussed whether the policies of the 1990s constitute a decentralization or rather a re-centralization process, since the national government has adopted important control mechanisms such as the definition of the basic syllabi and the implementation of national assessment tools (Senen González 2001; Feldfeber and Ivanier 2001; Rodrigo 2006).

3.3 Structure of the Education System According to the ISCED Classification

Regarding its organization, as it was mentioned before, the current legislation establishes four levels: preprimary, primary, secondary, and higher education. The preprimary education level (ISCED 0) constitutes a pedagogic unit and includes children from 45 days up to 5 years of age, inclusive, and the last 2 years are compulsory. According to official statistics, 1,851,601 pupils attended this level in 2019. The primary education level (ISCED 1) is also compulsory and makes up a pedagogic and organizational unit addressing children from 6 years of age. It can last 6 or 7 years (from 6 to 11 or 12 years of age) according to the structure chosen by each province. The secondary education level is compulsory and constitutes a pedagogic and organizational unit for students who have finished primary education. Secondary education has three tracks: general, technical, and artistic education. The first one is divided into two cycles: a Basic Cycle (ISCED 2), common to all

students, and an Orientation Cycle (ISCED 3), with a diversified nature according to different areas of knowledge. Until 2019 it included 13 orientations: social sciences and humanities, natural sciences, economics and administration, languages, arts, agricultural and environmental studies, tourism, communication, computer science, physical education, literature, physics and mathematics, and pedagogy. The technical education track is also divided into two cycles and its specializations are defined nationally by the Institute of Technical Education. Artistic secondary education is also divided into two cycles – basic and orientation– and may lead to a bachelor-oriented or a technical certificate, depending on the specialization chosen. It is important to add that transition between orientation (academic), technical, and artistic tracks is possible at any moment of schooling (depending the stage and direction of the track change students might have to sit for equivalence exams) and either of them allows access to any course of study or institution of higher education. The higher education level is not compulsory and includes university studies and nonuniversity higher studies provided by teacher training institutes and technical or vocational higher training institutes.

Besides the levels described above, the current law also establishes the existence of educational modalities aimed at people with specific training interests (such as technical or artistic education, offered at secondary and higher education levels), people who have not been able to complete the secondary level during their school age, groups with cultural identities to be preserved (e.g., aboriginal communities), or sectors of the population that demand special forms of attention. Eight modalities are distinguished: technical professional education, artistic education, special education, young and adults' lifelong education, rural education, intercultural bilingual education, education in contexts of deprivation of freedom, and home- and hospital-based education.

It is clear that many of them existed before the passing of the new law (i.e., technical, artistic, special, and adult education), but for others this means an important advance as they have achieved a new status: from special programs designed by different education offices to legally recognized constituent parts of the education system.

3.4 Personnel Supply

The history of teacher training in Argentina goes back to the end of the nineteenth century, when the education system was taking shape. There are three distinct lines of teacher training. The first one, which was mentioned in the historical section of this chapter, began with the creation of high schools geared towards teacher training (*escuelas normales*) in 1870. Then followed the creation of specific training for preschool teachers and the training of educators to train future teachers in the 1880s. Except for teacher training schools (the abovementioned *escuelas normales*), the other two involve post-high school phases of the educational process.

The second line, which began in the early twentieth century, entails university-level training through the creation of seminars on pedagogy and university departments of education. These programs aimed to complement the training of

university graduates who would work in high schools with a humanities orientation. Starting in the mid-twentieth century, universities developed their own programs in education and issued degrees that enabled teaching at the high school level and beyond.

The third line is, in fact, an outgrowth of the second. To respond to dissatisfaction with university training for high school teaching, institutes specifically geared towards that sort of training were created. Though they were initially few in number, they would have a great impact on teacher training in the largest cities in Argentina.

What would eventually become a divide between training for teachers and for secondary school teachers, especially those trained at the university, is the emphasis placed on pedagogy and actual teaching. Whereas those two concerns would be central in high schools geared towards training teachers (*escuelas normales*), higher education programs that trained high school teachers and especially university professors placed an emphasis on the subject that the professor or teacher would eventually teach.

Similarly, there would be a major difference between training at institutions geared towards high school teachers and training received at universities to become a high school teacher. Programs for future high school teachers would tend to echo the content of the school curriculum, whereas the more autonomous programs at universities would offer a more classic education.

The shift from high-school level teacher training (at *Escuelas Normales)* to post-high school teacher training is among the major changes that took place in teacher training starting in the 1970s, as well as the transfer of nonuniversity teacher training from the national government to the provinces. This transfer was accompanied by an institutional reorganization of the teacher training system geared towards reducing the number of training institutions and imposing an accreditation system. The accreditation system was not applied in all jurisdictions, nor could the ministries and their policies sustain it in those years.

Currently the government oversees training of preschool, elementary, and high school teachers, as well as professors of higher education specifically at *Institutos Superiores de Formación Docente* (institutes for teacher training, some of which have technical programs) and universities. After the aforementioned transfer, different levels of administration oversee these institutions, that is, they are supervised by the governments of each of the provinces and the City of Buenos Aires, whereas universities, which are autonomous, are supervised by the National Ministry of Education.

The challenges posed by the complexity of the system and the range of teacher training institutions were met with the creation of the *Instituto Nacional de Formación Docente* (INFoD), a national institute engaged in teacher training), as provided for by the National Education Law in 2006. This is a body responsible for coordinating teacher training policies at all levels.

Article 77 of that law establishes that INFoD should have a *Consejo Consultivo* (advisory council), whose members should represent the Ministry of Education, the Federal Education Council, the Council of Universities, relevant trade unions and private sectors, and the academic sphere. The *Consejo Consultivo* is conceived as a

forum for policy debate among all agents involved in the teacher training system and its oversight. At the same time, Article 139 under Title XII on temporary and supplementary regulations establishes that coordinated technical measures on teacher training policy agreed on by the Federal Education Board will be enacted through federal meetings that ensure the participation of the authorities responsible for governing the institutes under INFoD. In the brief experience of the past few years, these regular meetings have encouraged the sort of debate that teacher training demands.

A recent study on teacher training options in nonuniversity higher education institutions indicates that there are 1083 post-high school nonuniversity institutions that provide basic teacher training (Terigi 2007). Their characteristics include the following:

- Of these 1083 institutes, 657 (60.7%) offer teacher training exclusively and 426 (39.3%) also offer technical and/or professional training.
- Twenty-seven point nine percent (27.9%) provide training for preschool, 45.9% for elementary school, 66.8% for high school, and 20.5% for other levels or specialized training. There are major discrepancies in quality, and the number of teacher training institutes does not ensure enough teachers everywhere, or teachers with the necessary specializations.
- Of nonuniversity teacher training institutions, 57.5% are public and 42.5% private.
- Most of these institutions are located in the most populated provinces, which logically have the largest education systems. Most provinces have training institutions for each level of the education system, though some do not have enough graduates to provide the necessary number of teachers at all levels. This problem is most severe for preschool and specialized high school education.

Most nationally run public universities offer teacher training: according to data of 2007, of 38 such universities, 35 have teacher training programs (92.1%). Most of those universities (28) train high school level teachers in a variety of disciplines, only 8 train elementary school teachers, and 10 offer programs in preschool education. Proportionally fewer private universities offer teacher training than public universities: of a total of 42 private universities, 26 offer teacher training programs (61.9%) (Terigi 2007).

The heterogeneous nature of the teacher training system – one might even ask if it merits the term *system* – currently faces a challenge due to the prolongation of mandatory education and the growth of preschool education, goals established by the aforementioned National Education Law.

3.5 Transition to Work: Organization

The relation between education and labor and specifically the mechanisms of transition from school to work are long-standing much debated issues in Argentina,

and different policies and reforms can be identified throughout the history of the system. Unlike other countries with a strong tradition of having specific mechanisms to support this transition, Argentina has a history of steps forwards and backwards (that could be analyzed in the framework of the transformations of Argentina's economy and labor market and the process of schooling extension, together with the political discussions about the aim of these policies).

Firstly, in 2008 the minimum age for admission to employment was set at age 16, though the law defined a range from age 16 to 18 of protected adolescent labor. This means that it is legal for young people at this age to work under some regulations such as their parents' or tutors' authorization, a shorter workday and the condition to attend and finish school. It should be noted that this amendment was passed 2 years after the extension of compulsory education to the end of secondary school. Also, in this framework, several social and employment programs implemented in the last decade included the completion of mandatory education.

Regarding school-to-work transition, as it was briefly introduced, until the 1990s secondary school was diversified into orientation tracks: general, technical, commercial, and teacher training (this was an orientation of secondary school only until 1969), which provided a specialized degree. Also, historically, in the 1940s, the government regulated and institutionalized corporate apprenticeship programs, although they were terminated a decade later (Muiños et al. 2012). In the 1980s, under the last military dictatorship, the national technical council implemented for a period of time a dual apprenticeship system as an alternative plan in the orientation cycle of technical secondary schools (De Luca and Alvarez Prieto 2014).

In the 1990s, after the implementation of the new education structure and the incorporation of lower secondary school into the general basic education level, upper secondary school – *Polimodal* – shifted to a general knowledge, mildly orientation based type of schooling, which provided no specialized certificate. However, in order to give continuity to technical education, the national institute of technical education implemented short technical courses of study and combined them with *Polimodal*, granting a specialized technical degree (Hirsch 2015). Regardlessly, this was again modified by the new education and technical education laws, and currently technical education constitutes a diversified orientation of secondary school (mostly in the first years tough, its curriculum includes much of the general curriculum). Students can change from general to technical and otherwise, and both technical and general (and artistic) tracks allow access to any higher education course of study and institution. Graduates from technical secondary school obtain a specialized technical degree regulated within the framework of the National Catalogue of Degrees and Certificates of the National Institute of Technical Education (Hirsch 2015).

On the other hand, some mechanisms have been developed in the last decades. In the case of secondary technical education, the regular curriculum includes a certain amount of professional practice (Rueda Rodríguez 2014) during the orientation cycle of secondary school. Such practice is arranged by the school and carried out within the school itself or at companies or ONGs. As stated by the law, the aim is to bridge the transition to work, but the professional practice does not guarantee any

present or future job contract. Also, the regulation of internships has undergone some changes in the last decades. In the 1990s, a specific law provided for an internship system (which received much criticism since it might constitute a form of precarious work). In 2008, a new law introduced some changes such as the shortening of the workday (to 4 h) and a maximum term for the internship (from 2 to 12 months), and the establishment of minimum compensation (associated with the minimum salary) together with some guarantees such as health insurance (Adamini 2011).

The existence of a professional training circuit regulated by the Professional and Technical Education Act and the National Education Act should also be noted. Professional training has also a changing history and this institutions offer training courses and specializations of a wide variety (Jacinto 2015). Recently, national and some provincial governments have been implementing a closer articulation of these institutions with school completion.

To sum up, in the second half of the twentieth century and the beginning of the present one, the Argentinian educational system can be characterized by the progressive expansion of all its levels, especially secondary and higher education, the extension of compulsory education, and a series of institutional and academic reforms. In the 1960s and 1970s, a process of deregulation of private education and decentralization of the system of government took place. Later on, two periods of reform attempted, among other changes, to modify the academic structure.

While more population attended progressively more years of schooling, research started to show a process of differentiation of schooling related mainly to socioeconomic disparities in the last decades of the twentieth century. Although adolescent's access to secondary school tended to be universal, one of the main difficulties is related to progression, graduation, and to school quality disparities. The next section presents an overview of some of the inequality problems in terms of schooling.

4 Educational Trends and Highlighted Aspects. Current Issues Towards the System's Inequalities and Disadvantages

The pending issues that the current and future administrations must address in the education field in Argentina are significant. That is why it is necessary to design long-term policies far exceeding a specific period of government. For analytical purposes, we differentiate these issues into two groups: the historical and current ones.

Among those to tackle originating in the system's history, we point out the state-centered organization of the country, which has caused reduced provincial capacities for their autonomous development. In this context, the decentralization of the education system has collided with this limitation, causing uneven growth of each provincial system and resulting in unequal distribution of educational quality according to the student's place of residence.

Another historical challenge for governments is to address the strong expansive capacity of the Argentinian education system associated with a weakness in producing equal quality outcomes. This situation explains why there are many students in the system, but with little chance of having success in their educational trajectories, mainly in secondary and higher education.

These two historic weaknesses of the education system translate into current challenges to be addressed by current and future governments:

- Addressing the deepening difficulties arising from the relationship between the central government and the provinces, and the inequality among them that result in uneven teacher's salaries, an unequal funding system based on the development level of each province, and unequal capabilities for innovation of management and renewal of structures and institutions.
- Facing the increasing difficulties of provincial and national governments in terms of students' retention and graduation at the secondary and higher education levels which originate not only in socioeconomic factors but also in schooling conditions.
- Tackling the increasing fragmentation of the education system as a consequence of the existence of differentiated quality circuits by social sector, both among jurisdictions and between the public and private sector, and even within each of those sectors.
- Putting an end to the educational segregation process caused by the apparent "deterioration" of public schools' quality and subsequent transferal to the private sector (in many cases subsidized by the state), especially in urban more developed areas.
- Making secondary school universal, not only in terms of access (an area in which much progress has already been made) but in terms of progression and graduation. Also, ensuring that this inclusion process is accompanied by equal quality offer to all adolescents.

4.1 Inequality

As it was mentioned before, in Argentina, schooling enrolment has extended progressively in the last decades, particularly in secondary and tertiary levels, and compulsory education was successively extended. However, some scholars discuss that school has expanded in qualitatively unequal forms, continuing to reproduce original social inequalities (Krüger 2014).

In the first place, access to education increased at all levels and ages, particularly among students from poorer households. As it is shown in Table 3, in more than a 10-year period, access to secondary school increased almost 20 points among the young from the lower socioeconomic level, while it grew by 3 or 4 points in other socioeconomic levels where access to secondary school had already tended to expand. However, when it comes to compare graduates, although in absolute terms the figure might have increased, proportionally the increase was much slighter.

Table 3 Schooling rates for adolescents and young people according to the socioeconomic level of households, and access to and graduation from secondary school. Urban areas of Argentina, 2000 and 2016

	Low		Medium		High		Total	
Age group	**2000**	**2016**	**2000**	**2016**	**2000**	**2016**	**2000**	**2016**
% of adolescents aged 12–17 that attended school	*	84.5	91.4	91.0	98.4	97.4	91.7	93.0
% of young people aged 20–22 that attended secondary school	67.9	85.3	85.5	89.6	94.6	97.2	81.9	89.8
% of young people aged 20–22 that graduated from secondary school, among those who had access to it	53.1	57.9	64.9	72.8	85.3	86.9	68.5	70.0

Source: SITEAL, based on a household survey by INDEC (Accessed July 2018)

Also, while 58% of those coming from lower socioeconomic levels eventually graduated, the percentage increased to 73% and 87% in middle and high socioeconomic levels, respectively. It is important to note that these data do not provide information about other age groups, and studies have shown that in the last years, more young students might have tended to graduate from secondary school in their twenties (Scasso 2018). Related to this, data in the last years have shown that while secondary school enrolment expanded, retention problems remained, especially in the orientation cycle (upper secondary), much of which was expressed in difficulties in progression and graduation. In the context of this development and the expansion of compulsory school, some programs and policies were implemented, both small and large scale (Terigi et al. 2013).

In the case of higher education, as it is shown in Table 4, access increased in all strata although the proportion of young people (30–32 years old) that attended this level is much larger among those from high-income households. Something similar can be said about graduates: while, in 2016, 66.6% of people aged 30–32 who had attended higher education finished it, this percentage decreases to 49.4% among the young from middle-income households and to 35.5% among those from low-income families.

In the second place, schooling expansion has had an unequal form. Scholars have studied processes of segmentation (Braslavsky 1985), fragmentation (Tiramonti 2004), through which diversified quality circuits are generated, constituting an important factor for the reduction of learning opportunities and future trajectories for young people. Therefore, inequality has not only affected access but also the way in which students undergo schooling. In an early study, Braslavsky (1985) had shown the existence of segmented education circuits which threatened an egalitarian access to secondary school. Later on, in the context of a new significant high school expansion, scholars studied processes of differentiation within this education level expressed by mechanisms such as the distribution of material resources, teachers' allocation, enrolment distribution and students' access to schools, and school

Table 4 Schooling rates among young people according to the socioeconomic level of households, and access to and graduation from higher education. Urban areas of Argentina, 2000 and 2016

	Low		Medium		High		Total	
Age group	**2000**	**2016**	**2000**	**2016**	**2000**	**2016**	**2000**	**2016**
% of young people aged 18–24 attending school	31.6	38.2	44.6	51.5	No data available	60.4	45.4	46.5
% of adults aged 30–32 that accessed higher education	7.8	12.6	22.1	34.0	57.0	66.5	29.1	35.6
% adults aged 30–32 that graduated from higher education, among those who had access to it	38.7	35.5	46.2	49.4	61.0	66.6	55.6	58.0

Source: SITEAL, based on a household survey by INDEC (Accessed July 2018)

governance (Krüger 2012). Likewise, Cervini (2002) and Quiroz et al. (2018) have shown the relation of socioeconomic factors and secondary students' learning outcomes. This field of study – particularly the way original social inequalities tend to be reproduced and expressed in educational inequalities as the system expands and more students gain access to higher levels – continues to be a central issue of exploration in the context of recent reforms, the progressive universalization of secondary school, and the expansion of access to higher education.

4.2 Access to ICT and Digitalization

Digitalization and access to the Internet and technology are one of the main remaining challenges. Although in the last decade great efforts have been made in this direction, mainly by the implementation of the national program *Conectar Igualdad*, universal Internet access and the use of computers in class are still an outstanding obligation, especially in state-run schools. Launched in 2010 and terminated in 2016, *Conectar Igualdad* program aimed to provide students and teachers of secondary and nonuniversity levels with a personal computer, together with the development of digital content and training. In 2016, 63% of primary schools and 82% of high schools had access to the Internet; however, for both levels, the percentage of state-run schools misrepresented the total while in private institutions access was almost universal (Fig. 6).

Regarding the frequency of computer use in class, big differences can also be found among levels of the system and between state-run and private schools. As shown in Fig. 7, the use of computers is much more frequent in primary than in secondary school, at least according to the information provided for the last year of each level. Similarly, some differences can be found between private and state-run schools in both levels regarding Internet access.

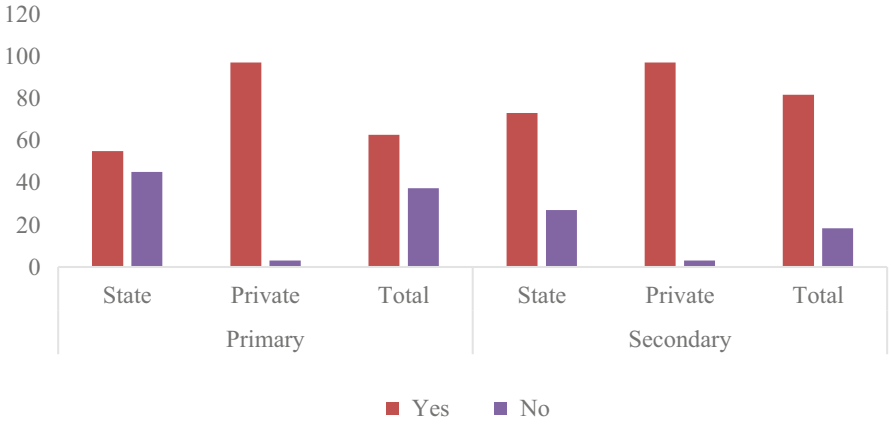

Fig. 6 Percentage of schools with Internet access by level of education and sector. 2016. (Source: Drawn up on the basis of "Aprender 2016: Acceso y uso de TIC en estudiantes y docentes," retrieved from https://www.argentina.gob.ar/sites/default/files/acceso_y_uso_de_tic_en_estudiantes_y_docentes.pdf)

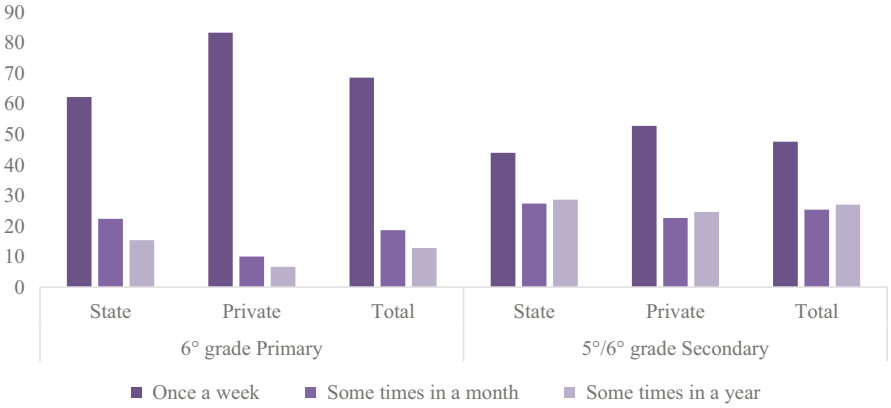

Fig. 7 Percentage of students that use computers in class by frequencies of use, level of education, and sector. 2016. (Source: Drawn up on the basis of document "Aprender 2016: Acceso y uso de TIC en estudiantes y docents," retrieved from https://www.argentina.gob.ar/sites/default/files/acceso_y_uso_de_tic_en_estudiantes_y_docentes.pdf)

4.3 International and National Assessments

Argentina started implementing standardized national assessments in the 1990s, as it was established in the Federal Education Law, with the creation of the National System of Quality Assessment. Later on, national assessment was pursued through the National Assessment Operations which were taken to a sample of students and schools in some cases, and to all of them in the case of the last year of secondary

school. As mentioned before, assessment constituted an instrument of the national state in the context of the decentralization of the educational system. Since 2016, the right oriented administration under President Mauricio Macri has implemented the *Aprender* assessments, together with the creation of new institutions and political plans, placing national standardized assessment as a central element of educational policies (Oreja Cerruti and Carcacha 2017). In addition, some jurisdictional administrations have been implementing their own assessment instruments since the 1990s, as established in the law.

A special comment might be made on the distribution of the national assessment results. While it originally promoted schools' comparison through *rankings*, the National Education Law regulated anonymity of students, teachers, and schools (Oreja Cerruti and Carcacha 2017). Although scholars and the educational community give further discussion to the National Assessment's methodology, implementation, and communication, test results serve to show some of the system's inequalities.

As regards PISA, Argentina has participated since 2001 except in 2003, when it did not take the tests for reasons associated with the country's economic crisis in 2001. The national ministry of education through its evaluation department is in charge of the tests. Between 2000 and 2012 Argentina did not improve significantly in any of the subjects since the country started to participate in PISA tests.

While results in PISA 2015 showed improvement, the country was affected by a change in the sampling criteria, which cancelled the comparability of country results both in terms of other countries and previous years. According to OECD, Argentina's results were excluded from the PISA 2015 publication because the population complying with the selection requirements for the sample was lower than expected. Rivas and Scasso (2017) agree: the Argentinean sample does not comply with the minimum quality standards. But the key questions about the reasons why this problem could not be identified on time and solved remain unanswered (p. 154). Nor has the OECD offered further explanations, nor has the new administration, in office since late 2015, demanded them (Fig. 8).

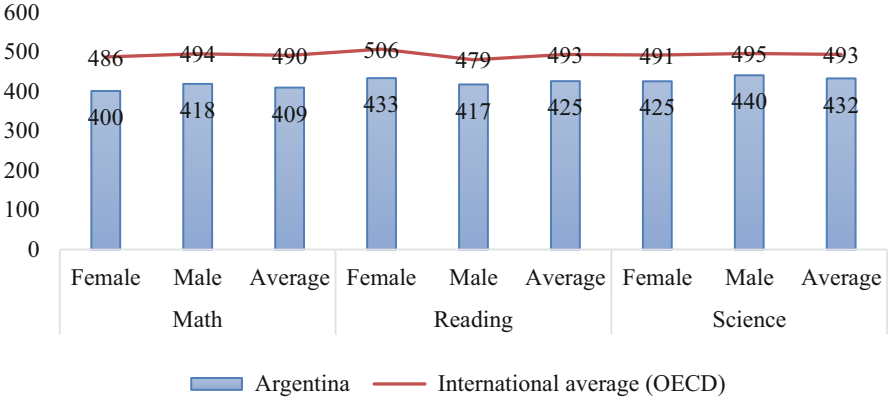

Fig. 8 Assessment results for PISA, by gender and subject. Argentina and OECD average. 2015. (Source: Drawn up on the basis of reports at: http://piaacdataexplorer.oecd.org/ide/idepisa)

5 Conclusion

From a regional comparative perspective, the Argentinian education system has stood out among other systems due to its high democratization, with high schooling rates on both elementary and high school levels. The role played by education in forming the State was crucial, showing during the twentieth century a gradual incorporation of various social sectors into increasingly higher levels of education. This capacity of expansion of the education system was not accompanied by processes that ensure high quality education to the same extent. The country's economic and political difficulties during key periods explain part, though not all, of this phenomenon.

The 1990s was a decade of profound changes that sought to overcome these difficulties on the basis of paradigms that privileged the efficiency in terms of cost/benefits rather than the democratization of the education quality. Decentralization processes applied from the central government without properly estimating provincial resources led to the fragmentation of the education system and deepened inequalities.

Currently Argentina faces the challenge of retrieving the notion of a single education system and introducing the idea of a system which, while reflecting the local particularities, should ensure equivalent outcomes with high levels of quality for all students, regardless of where they live or which sector (public or private) they attend. This challenge involves not only the availability of national and provincial resources but also innovation and the exchange of learning experiences in a coordinated system.

The extension of compulsory education and prolongation of the initial school level in addition to social security policies such as the *Asignación Universal por Hijo* (universal allowance per child, implemented during the last administration and maintained by the present one) are precisely aimed at achieving not only the incorporation of increasingly more students into the system – an issue where the system has proven successful – but also the students' permanence and progression until graduation, a historical difficulty at the secondary level and higher education.

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