# Chapter 4 <br> Education and Inequality in Finland, Spain and Brazil 

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#### Abstract

Finland, Spain and Brazil are three very internally complex and heterogeneous realities, with contradictions and permanent reforms to their education systems. In a first quantitative approach each country can be placed in a continuum of the education system that goes from most successful in terms of reaching a high level of education all across the population, in conditions of equity and facilitating youths' incorporation into the labour market, to least successful, with Finland and Brazil occupying either end of the spectrum respectively and Spain occupying an intermediate situation. Although there are differences, they share certain tensions in their respective education systems. On the one hand, about the conception of education, ranging from more utilitarian, human capital theories, to the more humanist and civic-minded perspective. On the other hand, the challenge of comprehensiveness between an academic and a vocational path. In addition, there is also the challenge of improving the education level of the population while also improving equality. The tensions differ from country to country, since their education traditions and cooperation and conflict strategies between the education agents, with


[^0]varying levels of resources and different alliances with political actors vary, as does the social consensus.

Keywords Education inequality • Educational systems • Brazil • Spain • Finland

### 4.1 Introduction

We have selected three countries with very different social and educational situations; these are Finland, Spain and Brazil. Finland is a country with a longstanding tradition in providing public education, with an advanced economy and an education system that has been a worldwide benchmark since the standardised PISA evaluations. Spain is a country of greater economic backwardness, and although it has experienced rapid economic growth in recent decades, the economic downturn of 2008 affected it especially. In turn, Brazil's economy is growing strongly, but it has started at a very low level and has huge territorial dispersion. Until relatively recently, its education system had not reached broad sections of the population, and it still has many problems both reaching all social strata and from the point of view of equality.

Despite the considerable differences in the three countries, there are a number of common elements. On the one hand, in all three there is a clear discourse in favour of education, guided by the theories of human capital, which see education as a resource. This discourse can be seen to a greater or lesser extent to be counteracted by the discourse that sees education as a source of citizenship. There are also similarities in terms of equity, either by promoting public education, albeit in different ways, with greater intervention by the state in the education system, regulating private centres with public funds or guaranteeing access quotas for students from the most popular sectors.

The generic trends in the educational debate are present in each country, but they take different forms, considering their historical, economic and social situation.

This chapter provides a general presentation of the difficulties of conducting comparative studies in education. Below we present internationally comparative data that serve to locate the three countries chosen for comparison. Subsequently, we perform a more in-depth study of the educational situation of each country.

### 4.2 International Comparison of Education

The comparison of education systems presents serious challenges and difficulties. First, the comparison of societies themselves has epistemological difficulties stemming from the selection of the unit to be compared. Based on the size of the nation state, the political-administrative unit of the state became the unit to be compared.

It is important to remember that precisely the construction of the national education systems contributed to the consolidation of the nation states and to the creation of the citizenry who legitimised these states. The exportation of this model to countries colonised by the Europe a powers also led to the exportation of the cultural models on which education was based (Torres 2017).
In the educational field, more difficulties arise for the comparison. Although certain structural trends are shared, such as the rise in education rates, the construction of education systems has a historical, cultural and "societal" context (Maurice et al. 1982; Lendaro 2012) which means that each education system has its own characteristics that are difficult to grasp for those people not educated in a national system. Part of the difficulty of immigrant children and young people's integration in receiving countries is related to the foreignness of the cultural, organisational and didactic parameters of the education centres. For example, the presence and quantitative or qualitative importance of private education depends on this historical-cultural context. Another point of difficulty is that education systems are not static. Educational regulations and reforms change, and as such, a time-based comparison must be added to the spatial comparison. Education reforms, however, can be consistent with international guidelines (Green et al. 2001), as we will see below. Another difficulty lies in the implementation and recognition of the different education levels. Although a certain consensus has been reached based on the International Standard Classification of Education (ISCED), the differences between compulsory and noncompulsory levels, or between academic and vocational studies, mean there are still grey areas in the comparisons.

If the simple exercise of comparing education levels entails huge difficulties, comparing the degree of equity or the contribution to the social reproduction of the different education systems is even more complex, since the different social structures and the different reproduction or social mobility strategies of the families must be added to the choice of schools. There is global consensus that primary education must be universal and provide all students with basic skills, regardless of class or gender. At the top of the educational pyramid, university has gone from being an elitist institution for the training of ecclesiastical officials and later politicians and business owners to an institution of middle classes that is increasingly concerned with equal access (Martín 2010). In secondary education very different responses for the connection between primary and upper education can be observed, depending on the traditions of the different countries. Some authors indicated this debate about the function of secondary education, such as Durkheim in France (Durkheim 1992) or Dewey in the United States (Hyslop-Margison 2000). The construction of a secondary education segmented between classic and academic paths on the one hand and modern and vocational paths on the other was related to the class structure that was being established in the capitalism of the end of the nineteenth century and beginning of the twentieth century (Ringer 2003). More recently, the European debate was established, classifying the education systems as "tracked", "linked" and "unified" (Raffe 2003). The "tracked" systems have a secondary education divided into an academic path and a vocational path, usually with a very early selection of students. This selection contributes to the reproduction of social positions.

This is the system in Germanic countries, with very effective vocational training and a pronounced differentiation between centres. The "unified" systems respond to comprehensive reforms made in different European countries and in the US during the twentieth century, which delayed the age at which students choose between different paths and offered a shared curriculum. The Nordic countries took this model the furthest, within the well-known model of a strong welfare state, with redistributive and egalitarian policies. The "linked" systems are in intermediate situations, often with comprehensive lower secondary education and a higher secondary education divided between vocational and academic paths, although with "bridges" (possibilities of changing) between both paths. In general, the academic path is more prestigious than the vocational paths, which are avoided by the middle classes and by the segments of working classes who have pronounced social mobility strategies.

As stated above, educational reforms and in general the educational policy lead to changes in the education systems that take into account the comparison with other countries. There are two very clear examples of this "benchmarking". The first is the European Union and its 2020 goals, with indicators to share on early school drop-out or girls’ access to technical careers. European convergence is also discussed a lot in higher education, with the European Higher Education Area (EHEA) and the European Credit Transfer System (ECTS), and in professional teaching, with the application of the European Credit System for Vocational Education and Training (ECVET). The second example is the well-known PISA study conducted by the OECD. Here there is a change of paradigm; convergence is no longer sought after through education organisation, but through the results of the learning. Analysing and discussing this change of paradigm is beyond the scope of this chapter, but the ranking or classification of countries according to the score obtained in the different tests has been introduced in the international agenda. Although officially the goal of copying the best is not being pursued, and certainly, the goal of compared education was never to define the best system (García 1986), what is certain is that in recent years Finland has seen an increase in the visits of experts and political actors from many countries to try to unveil the keys to success of the Finnish system with the explicit intention of importing these key elements to the national systems.

A paradigmatic example of the exportation of a successful model is that of the Germanic dual vocational training. Praised by many as a benchmark in the fit between education and employment, often the most superficial part is imported, which is that students do a considerable part of their training in companies, but the conditions facilitating this training are not imported (Köhler 1994), leading to fallacy $1: 1$ (Euler 2013): thinking that educational systems can be exported without taking into consideration the economic, cultural and institutional conditioning factors.

The fact that comparisons in the educational field are difficult or have undesired effects such as the ranking (for some it is a desired effect) does not mean that they are not a source of knowledge and analysis. This chapter presents a comparison between Europe and Latin America based on two axes, with all the precautions and
limitations. The first axis will be international, based on the analysis of a selection of indicators related to equity; indicators for which there is information available, indicators of access to the different educational levels and indicators of results such as the PISA tests or qualification rates. Using the database, the maximum number of countries from Europe and Latin American will be entered, and a time-based series will be reconstructed from 2000, to see the potential impact of the economic recession in Europe at the end of the first decade, and of the economic transformations the South American continent has undergone in these two decades.

This first axis will be essentially very descriptive, since, as mentioned above, exhaustive knowledge of the educational system of each country is required to analytically interpret the results. For this reason we have introduced the second axis, of a national nature, in which the debates, policies and educational reforms that have taken place in three specific countries, Finland, Brazil and Spain, will be analysed in depth to improve their positions in international competition and to develop international cooperation strategies that contribute towards improving educational equality.

To close the chapter, some conclusions are developed about the comparison of the education systems of different countries as well as a proposal for a comparative research agenda that minimises the risks and maximises the potential of educational comparison.

### 4.3 Historical and Economic Context

The three countries are experiencing an upward trend in the GDP per capita in purchasing power parity (Fig. 4.1), but with highs and lows as a result of successive economic downturns. Spain felt the effects of the oil crisis later than Finland, as the


Fig. 4.1 Evolution of GDP per capita in purchasing power parity dollars (1950-2016). Source: Maddison Data Base Project (2018)
rise in the price of hydrocarbon was postponed due to political instability, and in Brazil no effect was directly observed. Prior to the 2008 recession, there was a considerable increase in the GDP per capita in the three countries, with a period of rapid growth in each country. The return to pre-recession levels has not occurred in Finland or Brazil, and Spain is demonstrating an unstable recovery.

### 4.3.1 Educational Level

Among the young adult population, from 25 to 34 years of age, Spain and Finland are consistent with the international averages of the OECD in the proportion of students in higher education (in Spain this includes university and higher level cycles of vocational training), around $40 \%$, while Brazil stands at minimum levels, at a distance from the OECD levels, at a little above 10\% (Fig. 4.2). Spain stands out from the other OECD countries in the large proportion of students who do not study beyond lower secondary education (the Compulsory Secondary Education (ESO), as their maximum qualification) and the low proportion in higher secondary education (Bachillerato and mid-level vocational training), standing at around one third of the young adult population. ${ }^{1}$ There is also a great difference with Finland (5\%) at this level, which is one of the countries with the lowest proportion of young adults in the lowest education level of those recorded (lower secondary education). In the case of Brazil, the proportion in lower secondary education is more similar to Spain.


Fig. 4.2 Percentage of population aged 25-34 years, with education below Lower Secondary Education, with Upper Secondary Education and with Tertiary Education. Source: OECD (2019)

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Fig. 4.3 Population with tertiary education in 2007, percentage by age group. Source: OECD (2009)

This situation has a very different historical evolution. In Fig. 4.3 we observe that the situation in Brazil has remained stagnant, by comparing the population aged between 25 and 34 with the population aged between 55 and 64 in 2007, while Spain is one of the OECD countries to have most improved, after South Korea and Ireland. In turn, Finland follows a similar progression to the OECD average. The educational levels of young adults have improved in the last decade, and it is important to note the case of Brazil, which seems to have started to take off, after its secular stagnation (see Table 4.3 in the Appendix). There is also an inverse gap in education, since the education level reached by women tends to be higher than that of men.

### 4.3.2 PISA Results

The average results in the countries participating in PISA between 2000 and 2015 stand at very similar levels in reading competency (Table 4.1). In the case of Spain, the differences are not statistically significant, while in Brazil there is a slight improvement, and in Finland a worsening (Table 4.2).

In general it is observed that the countries that have improved in PISA are those that began with very low competence levels and whose economic situation improved intensely in the first decade of the millennium (Rowley et al. 2019). The trend towards stability, which is observed in the majority of the countries, does not coincide with the worsening in skills in Finland. A statistical effect of regression towards

Table 4.1 Correlations between results in reading literacy between 2015 and 2000

|  |  | 2000Score |
| :--- | :--- | :--- |
| 2015Score | Pearson correlation | $0.910^{* *}$ |
|  | Sig. (bilateral) | 0.000 |
|  | N | 41 |

Source: Authors elaboration
**The correlation is significant at the 0.01 level (bilateral)

Table 4.2 Evolution of reading skills in PISA

| Country | 2018 | 2015 | 2012 | 2009 | 2006 | 2003 | 2000 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Brazil | 413 | 407 | 407 | 412 | 393 | 403 | 396 |
| Finland | 520 | 526 | 524 | 536 | 547 | 543 | 546 |
| Spain | $*$ | 496 | 488 | 481 | 461 | 481 | 493 |
| OECD | 487 | 493 | 496 | 493 | 489 | 494 | 493 |

Source: OECD, various years
*No data available for Spain.
the average appears to be observed (the most advantaged or disadvantaged tend to move towards average values).

### 4.3.3 Unequal Opportunities in PISA and Social Origin

If we compare the unequal opportunities in science competences between 2006 and 2015, we do not observe statistically significant differences in Finland and Spain, as occurs with the majority of the participating countries. But in Brazil there has been a $4 \%$ reduction in unequal opportunities, as can be observed in Fig. 4.4.

As regards the effect of economic inequality (measured by the Gini index) on the educational results, although some authors highlight its importance (Baudelot and Establet 2009), it appears to be a hasty reading of the data. Graph 5 shows the relation between the two indicators. A clear trend cannot be observed, especially if we separate the OECD countries from non-OECD countries. The Latin American countries are notable for their high level of economic inequality, especially Brazil, while inequality in Finland is quite low and in Spain it stands at the average of the OECD countries, but it is considerably high for an EU country. The correlation between the score in reading and economic inequality for the OECD countries is due to the anomalous behaviour compared to Turkey, Mexico and Chile, with very high levels of inequality for the OECD and low scores in reading.

### 4.4 Education in Finland

Education has played a pivotal role in the development of independent Finland, the Finnish society and welfare state. On the one hand, mass education was part of the rationalistic ideology of modern society. On the other hand, education was
considered as a social right, and as a service provided by the state to its citizens (Blanco and Oinonen 2019).

The education level of Finland's population has risen steadily since 1917, during the decades of independence. In the early years of independence, the challenge was to guarantee primary education to all children. The Compulsory School Attendance Act came into effect in 1921, and accordingly, 6 years of compulsory education applied to all children aged $7-13$. In 1920, around $70 \%$ of 15 -year-olds were literate but the number of pupils in primary schools rose quickly after the act came into effect. By the mid-1930s, $90 \%$ of children aged $7-15$ received schooling and, gradually, all children of school age were in education. In the late 1950s, 2 years of civic school were added to primary education, which then consisted of 8 years. In this system, in fourth grade, pupils applied for admission to secondary school, which opened the doors to further studies such as the matriculation examination. Those who were not admitted to secondary school or whose parents could not afford or did not want to educate their children, stayed in primary school (Statistics Finland 2019).

The increasing wealth and standard of living of families, and the rapid structural change from an agrarian to an industrial and service society meant that parents increasingly wanted their children to receive better education than before and young people needed to be educated to find their place in the changing labour markets. Consequently, by the 1970s, already $60 \%$ of the age group went on to middle school, that is, the lowest grades of secondary school (Ibid.).

A law on the basis of the education system was enacted in 1968, and the comprehensive school was established. The idea of a comprehensive school for all was based on the underlying values of the Nordic welfare state ideology: social equality, collective responsibility, solidarity and equal opportunities. The reform of comprehensive education created the basis for uniform, consistent and high-quality education for all, regardless of their social origin, status and place of residence. Everybody in the same cohort received uniform, free education for 9 years after which they could continue either to upper secondary school and then higher education or to vocational education (Blanco and Oinonen 2019). Currently the statutory school age covers the $7-16$ age group, and a person cannot be exempt from it. In the early 2000s, pre-primary education was reformed and, as a result, all 6-year-old children are entitled to receive pre-primary education during the year before their compulsory education starts (Statistics Finland 2019). Furthermore, the government has made a proposal to the parliament to raise the age of compulsory education from 16 to 18 . The act is expected to be in force in 2021.

Secondary school attendance was rare until 1920. Less than $10 \%$ of the age group went to secondary school and most of them were children from affluent urban families. By 1960, around $40 \%$ of the age group went to secondary school and an increasing number of the pupils were children of parents with only compulsory education. In the early 1970s the number of children who started secondary school rose to $60 \%$. Consequently, attendance in upper secondary general school, i.e. higher grades of secondary school, rose quickly. In 1960, around $20 \%$ of the age group went to upper secondary school whereas 20 years later the corresponding percentage was 50 . In the 2000s the annual number of entrants to upper secondary


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Fig. 4.5 Relationship between reading literacy and Gini index (economic inequality), differentiating between OECD countries and the rest. Source: OECD (2010)
general school has exceeded $60 \%$ among 16-year-olds (Statistics Finland 2019). Besides the general increase in education level, women's education level has exceeded that of men. 1947 was the first (peace time) year when the number of women who passed matriculation examination exceeded that of men. Today, nearly $60 \%$ of the pupils who pass the matriculation examination are women (Ibid.) Naturally, this was also reflected in higher education.

Higher education in Finland dates back to 1640 when the first university, the Academy of Turku, was founded. It was moved to the new capital Helsinki in 1827 and renamed as the Imperial Alexander University in Finland and University of Helsinki, from 1919. The University of Helsinki remained the only university in the country until the early twentieth century. Since the late 1960s and 1970s, the expansion of higher education both in terms of student numbers and the geographical spread of new institutions occurred. Expansion continued in the 1990s when a new sector of higher education, Universities of Applied Sciences, was established. The aim was to increase the level of know-how of the workforce and to facilitate the change from secondary education to higher education (Antikainen 2006; Blanco
and Oinonen 2019; Välimaa 2018). Universities also opened satellite campuses, called university centres, in towns without a university of their own (OECD 2017). Currently in Finland, there are 13 universities, 11 of which are public universities (with free tuition for Finnish students) and 2 of which are foundation universities with free tuition for Finnish students and students from the EU and EEA member states. There are also 23 Universities of Applied Sciences (OKM 2019a).

Until the real expansion of higher education in the 1960s, universities were elite institutions, as indicated by the student numbers. In 1900, there were 2500 students at the University of Helsinki. In 1920, there were 3600 students in all the universities together. In 1950, the number of students in universities in Finland had exceeded 10,000. The 1960s was the turning point in Finnish higher education. In 1960, the number of university students was 20,000 but by the end of the decade the number had tripled to 60,000 (Statistics Finland 2019). Today, $41 \%$ of $25-34$-year-olds hold a tertiary degree. The figure is below the OECD average largely due to the selective admission system compared to many other OECD countries (OECD 2019.)

Women's attendance in higher education has a longstanding tradition in Finland. Since 1885 , women have been able to attend university and their numbers increased quickly. By 1907, $21 \%$ of all students were women. Compared to other European and Nordic countries, the proportion of female secondary school graduates and university students was high in Finland (Blanco and Oinonen 2019; Välimaa 2018). After the Second World War, the number of women in higher education grew substantially. Today, women complete nearly $60 \%$ of all university degrees in Finland (OECD 2019).

Vocational education has also increased in Finland. Although vocational colleges were already established during the late nineteenth century, the act on vocational schools was passed in 1958. Vocation school could be attended after primary school. Vocational education has undergone continuous changes and developments over the past decades. Currently it takes 3 years to obtain a vocational qualification. Recently apprenticeship training and competence-based skills examination has been emphasised in the Finnish vocational training system (Statistics Finland 2019).

### 4.4.1 Neoliberal Turn in Education Policies

Neoliberal discourse started to influence the Finnish social and education policies at the beginning of the 1990s. The universal comprehensive school was accused of 'levelling' students, not recognising and fostering the potential of gifted students, and of its inability to meet the needs of the information society and ever-increasing global economic competition. The demand for 'freedom of choice' in schools emerged alongside the idea of the education system as a service aimed at enhancing the economic competitiveness of the country. Ideas of new public management, continuous assessment and accountability were adopted in education policies during the 1990s (Tervamäki and Tomperi 2018). However, Finland's enormous success in PISA assessments starting from 2001 subdued the heavy criticism of the
comprehensive school system (Rinne and Järvinen 2010). As the PISA-fever has subsided, voices demanding a more structurally efficient and flexible education system that better meets the needs of changing labour markets are increasingly louder.

The former Prime Minister Juha Sipilä's centre-right government (2015-2019) started extensive and fast-moving reforms in the Finnish education system. According to the government programme Finland, a land of solutions (VNK 2015), the focal aim of the education policy was the so-called digital leap that is modernising digital learning environments, approaches to pedagogy, and fostering connections between education and working and business life. One of the original flagship initiatives of Sipilä's government was the Reform of Vocational Upper Secondary Education (VET), which came into effect in 2018. It aims to effectively reorganise vocational education to be demand-driven, competence-based and customeroriented (OKM 2019b). The VET reform is defined by the same catchwords and leading principles that are central to the PM Sipilä's government's education policy as a whole, and at all levels of education. From preschool to university, education and training must provide individual learning paths that flexibly and swiftly respond to the needs of future work life that requires new kinds of competences.

Like in most countries, in Finland, higher education and especially the university sector have been most severely affected by the neo-liberal tide in education policies (Lindberg 2013). In line with the wider higher education reform in the European Union, the Universities Act (558/2009) that came into effect in 2010 was built on such principles as transparency, participation, accountability, effectiveness and coherence. Universities were no longer treated as government accounting offices. Consequently, universities' financial and administrative authority strengthened, and they became separated from state bureaucratic structures. Nevertheless, the state still holds strong financial control over universities' affairs. According to Timo Aarrevaara, academic freedom (emphasised in the act) has shifted towards greater economic freedom rather than freedom of research, teaching and learning (Aarrevaara 2010).

The need for structural reform has become a dogma particularly in the Finnish higher education policy, even though many researchers and education experts have questioned its rationality, grounds and current measures. The demand on universities to enhance their effectiveness (shorter duration of studies, students' quicker transition to work life, enhanced collaboration between universities and business, more profiled division of labour between universities, etc.) is linked with tightened funding. Paradoxically, higher education institutions (as well as upper secondary education institutions) are expected to perform more and better with fewer resources. Furthermore, a large proportion of previously basic funding has been converted into strategic, competitive funding. The consequence is that education policy reforms are no longer long-term development schemes but short-term projects leading to stop-go policies (Lindberg 2013; Tervamäki and Tomperi 2018). This, and the fact that current education policies appear to be based on a strong belief that employers and enterprises are better able to steer education and training than schools, teachers, pedagogical specialists and researchers, has triggered discussion about the state and future of social and educational equality in Finland.

### 4.4.2 Education and (In)equality

Over the past 50 years, the Finnish education system has been quite successful at providing educational opportunities for all. This, however, does not mean that inequalities have disappeared. Until recently, social mobility has been common in Finland thanks to the universal and free education and to an educational system in which students can move from vocational education to university studies and vice versa. Lately, however, the rise of education level has halted while, at the same time, both education level and choice of educational careers appear to be increasingly hereditary in Finland (Keski-Petäjä and Witting 2016). In fact, teachers, rectors, councillors, professors and researchers, as well as social workers, have observed that social stratification in Finland is increasing along with the neoliberal turn in the education policy (Kirjavainen and Pulkkinen 2017; Vettenranta 2015).

Market oriented (neoliberal) education policies and reforms emphasise personalised learning paths and expect students-young and adults alike-to be increasingly self-guided and self-directed in their studies. Not all students have the ability to individually self-direct their education careers successfully. Actually, there are studies indicating that a large number of students (at all levels of education) hope for more structured teaching [e.g. Amisbarometri 2015 ( 2017)]. The critics emphasise that 'freedom to choose' policies should be accompanied with proper guidance and counselling resources to ensure that education reforms do not jeopardise equal opportunities for education and training, work career and well-being (see e.g. Rinne and Järvinen 2010; Tervamäki and Tomperi 2018). Due to severe budget cuts in the education sector, adequate resources for education institutions to provide personalised guidance and counselling are not available. Under these circumstances, it is expected that those who have personal and social resources, capabilities and support from home, family or circle of significant others will benefit from 'freedom of choice' and do well. However, those who have challenges, be they in learning, in language skills, cultural competences or social support will find it equally if not more demanding than before to make their way in the education system and later in their working life.

There are significant differences, for example, in attitudes towards education, in learning opportunities and learning outcomes between boys and girls, between original population and immigrants, and between students in vocational education and general upper secondary education. The feminisation of education has been a public concern for some time in Finland. According to statistics, boys are more likely to choose vocational rather than general upper secondary education than girls after compulsory education. Males are also more likely than females to drop out of education (Rinne and Järvinen 2011). Consequently, the majority of university graduates are women in all fields with the exception of natural sciences, where the gender division is fifty-fifty, and information and communication technology (ICT) and technical sciences where a minority of graduates are female (Statistics Finland 2018). Gendered career choices in education are also reflected in segregated labour markets. Even though Finnish women are, generally speaking, better educated than
men, the proportion of women in managerial positions is slowly rising (Koivunen 2015).

The latest development in Finnish education policies has raised a lot of public discussion and concern. Sometimes the critics of current policies are labelled as those resisting change. It is clear that the education system must develop according to the changing world, but the question is how and on whose terms. Market oriented education policies have presented business and commerce as experts to steer and plan education. This has led to a rather one-sided view of the skills needed in the future to ensure economic growth and well-being in Finland. The emphasis is placed on mathematics, natural sciences, technology and ICT, leaving humanistic and social scientific subjects aside (Tervamäki and Tomperi 2018).

From an international perspective, Finnish education institutions appear to be equal in standards of education and professional skills of teachers and staff. Regardless of recent changes, the effects of social origin, status and place of residence on educational opportunities in Finland are slight compared to most countries and the general education level of Finnish people is high. The Prime Minister Antti Rinne and coalition government published their strategic programme Inclusive and Competent Finland-a socially, economically and ecologically sustainable society in June 2019 (VNK 2019). Rinne's coalition government and the new coalition government led by Prime Minister Sanna Marin (from 10.12.2019) plans to revive education and science by stopping cuts and increasing funding. In addition, the new government plans to increase the compulsory education age from 16 to 18 . How these policy changes influence the education level, know-how, well-being and equality of people in Finland remains to be seen.

### 4.5 Educational Inequalities in Spain

The debate on educational equality/inequality in Spain has a long way to go, both academically and politically. Since unprecedented educational growth began in the 1960s, much later than in other European countries, the school system has been subject to a strong tension between the expectations the different actors have of education and the capacity of the school institution to respond to these expectations. In social terms, school investment was used by the working classes as a social mobility strategy, and by the emerging middle classes as the key strategy for maintaining their social position. The elites responded by extending the educational pyramid to sustain their relative position.

In the 1970s and 1980s there was a broad consensus on the need to provide schooling for all children and adolescents in the 6-16 age group. Whether or not they would study the same curriculum was another matter, as will be discussed later. But schooling rates also began to grow in the pre- and post-compulsory levels, which introduced the question of inequality at these levels. In the 16-18 age group, school drop-outs were, and continue to be, more present among lower class children, which distances them from access to higher education and leads them to a
precarious labour market. Partly because of the pressure of the European Union's 2020 targets, the decline in what is now called early school leaving is a political objective that generates strong consensus in the educational community and in the political sphere. Another question is how to reduce this drop-out, curiously called premature, because it seems that normative schooling has to be extended to 18, 20 or even 24 years. It is not on the Spanish political agenda to extend compulsory schooling until the age of 18 , as in some European or Latin American countries where it was introduced some time ago. The role of vocational training as a key strategy in reducing early school leaving will be discussed below.

The pre-compulsory level is also the subject of debate in academia and politics. There is already enough literature (Elango et al. 2016) pointing to a high correlation between early schooling and better outcomes at the end of compulsory education, as well as a lower propensity for risk behaviours. In Spain, the 3-5 age group has become practically universal, and the debate focuses on the $0-2$ age group. The former has grown considerably in recent years, and in the current debate about the formation of the government in Spain, the extension and especially the public funding of this stage has been raised. The growth of what in Spain is called early childhood education has satisfied the demand of families with qualified jobs and high purchasing power, without entering too much into the educational quality of the centres. Working-class families have more traditional patterns, such as the withdrawal of the mother from the labour market or the use of community networks, with grandparents as caregivers for the youngest children. Increasing public funding for childcare facilities would render access to these facilities more equal.

Access to university is one of the focal points of the discussion on equity in the education system. In three generations, Spain has gone from having 5\% of each cohort in university to $40 \%$, which has generated wide debate on the widespread increase and/or democratisation of university. This widespread increase has two dimensions: the loss of educational quality due to the number of students per classroom, and the devaluation of qualifications. It has long been said in numerous forums that Spain has "too many" university students, but it is not clear how to reduce university admissions in a way that is not regressive from a social point of view, nor is it at all clear that wage devaluation is important enough to discourage middle-class and lower-class young people from going to university and seeking a supposedly better qualification in vocational training (Martínez 2017). With regard to democratisation, although it is true that there has been an increase in access to university for young people from lower classes, in recent years the difficulty maintaining the access rate has been highlighted, due to the economic downturn that began in 2008, which has led to an increase in university fees and a reduction in the average amount of scholarships, although it is also true that the opportunity cost has decreased due to the recession itself.

In order to understand the mechanisms of social inequality in access to different levels of education in Spain, we must take into account the centuries-old distinction between public and private schools. Due to the particularities of the social and political history of the country, the presence of the church in the field of education has been and continues to be very important. In compulsory education, there are three
types of centres: (a) publicly owned centres, financed by the state and managed directly by the various educational administrations; (b) state-subsidised private centres, which are privately owned centres, i.e. managed by private actors, mostly religious orders, but financed by the state to ensure the free compulsory stage; and (c) private centres, which are managed by private actors and financed exclusively by families. Needless to say, the latter are highly selective centres, some are the headquarters of educational multinationals (French secondary school or German school) and many have a conservative educational orientation, for example in the segregation of boys and girls.

In general, private charter schools are concentrated in middle-class urban areas, and in the poorest areas there is practically only public schooling. This leads to a key aspect of educational inequality, which is urban and school segregation. In cities such as Barcelona, the rates of urban segregation are very high, which means that the social composition of educational centres depends very much on the environment in which they are located. But there is also school segregation within the same territory, in which public schools educate the population with fewer economic or cultural resources, such as the population of foreign origin or cultural minorities. The question of how to reduce school segregation, especially at the local level, has been on the political agenda for years, but the redistribution of pupils classified as problematic is not easy when there is a deep-rooted culture of school choice that justifies precisely the existence of selective private schools. However, this great social segregation of educational centres is not accompanied by a great segregation from the point of view of competences; on the contrary, Spain is a country with a low level of segregation by competences between centres (OECD 2016). This invites us to think that the quality of schools is rather homogeneous and that the differences in results between private and public schools are due to the different socio-economic and cultural composition. The quality of the school infrastructure, the homogeneous processes of teacher training and the control of the Ministry of Education over the curriculum, could be producing an education that is rather homogeneous in terms of quality, didactics and content.

The presence of private providers in higher education had been symbolic until two decades ago. The university expansion of the 1980s and 1990s was mainly channelled into public centres, increasing enrolment and the number of centres, even in small cities far from the big capitals. However, from the first decade of the twenty-first century onwards, there has been a significant increase in the supply of private centres, both undergraduate and postgraduate, which has meant a social segmentation of university education. Beyond the private providers, there is debate about the privatisation of the public university, in a double sense: the management of higher education centres, increasingly oriented in business terms of accountability, and the subordination of curricula to the needs of the labour market. This point will be developed later in the analysis of education policies.

In addition to access, another focal point of educational inequalities is school performance. Traditionally these results were measured with notes and qualifications. Since 2003, with the appearance of the PISA report, there has been a paradigm shift towards the measurement of competences. In comparative terms, it is
easier to measure competencies than grades and degrees, which depend on the educational design of each country. It is known that the PISA tests measure competencies in mathematics, reading and science from a questionnaire answered by a sample of 15 -year-old boys and girls. Of all the analyses carried out, two results can be highlighted for the Spanish case. The first is that Spanish students are below the OECD average. Although the distance from the average is small, the fact that it is located in the lower part of the ranking has had a very strong and negative impact on Spanish public opinion and the political agenda. The second is that there is a certain level of equity in the results; in other words, the distance between upper- and lowerclass students (or socioeconomic status, in PISA terminology) is smaller than other reference countries such as Germany and the United States. It has also been criticised that the negative point of this egalitarianism is the excessive mediocrity of the results, and that the Spanish education system does not encourage excellence. Despite the success of this argument, what really happens is that students with a low social background achieve better results than in other countries, while those with a high social background have worse results, which explains both equity and the lower-than-average outcome.

One of the effects of the publication of the successive PISA reports has been to look for the countries with the best scores, especially Finland, and the formula for increasing performance in competences and for improving excellence. But the focus has been almost exclusively on the internal part of the education system, such as didactics, curriculum, teacher training and school management. Very little attention has been paid to the factors that explain much educational inequality, such as school segregation or the social structure itself.

In addition, notes and qualifications continue to be very important in Spain. Moreover, there is not a very strong correlation between results in PISA competencies and the degree that certifies passing compulsory school. For example, while the outcomes of competencies in PISA have remained stable throughout the economic cycle, early school leaving has a strong pro-cyclical behaviour, due to the fact that it varies in inverse function to youth unemployment. (Martínez 2019). The results of many investigations have shown that there is a considerable distance between grades depending on the economic and cultural capital of the families, and that even with equal grades, educational expectations are lower in lower-class families, and the propensity to drop out of school is lower in middle-class families, even if they have low grades.

The inequality of results translated into qualifications affects a field that is also subject to strong social inequalities: incorporation into the labour market. Despite all the discourses on the devaluation of qualifications and the distance between training and the needs of the productive system, all the statistics yield three persistent data: unemployment rates decrease as the educational level increases, the wage return increases with the educational level, and the over-qualification rate is relatively small. Of course, the economic downturn of 2008 has had a negative impact on these three indicators, but the gap between graduates and unqualified young people has widened (Martínez 2015). A relatively positive impact of the recession has been the increase in school retention or re-entry into the system, especially in
vocational training, by lowering the opportunity cost. And indirectly, the misnamed "NEET" group (youths who are not in Education, Employment, or Training) has reduced; a definition that has become a conceptual category and subject of public policies, in spite of its many conceptual and practical limitations (García Fuentes and Martínez 2020). But this category includes from lower-class girls who voluntarily or involuntarily withdraw from the labour market to middle-class boys and girls who take a sabbatical year, so it does not seem reasonable to use it as a sociological category or as a basis for the definition of public policies. In addition, statistics tend to overestimate the quantity of the phenomenon and the youthfulness of the collective.

Vocational training is deserving of a separate chapter regarding the transition from school to the labour market. Designed precisely as an interface between training and employment, vocational training in Spain has evolved due to tensions in both fields: the fit with the education system and the link with the labour market. As regards the fit with the education system, until the 1980s professional training had a very subsidiary character compared to academic training, and the selection between the two paths was made at the age of 14 . In the 1980s, the idea of comprehensive secondary education came to the fore, after more than 20 years lagging behind the Nordic countries where the unified curriculum was most successfully applied up to lower secondary education. One of the most widely used arguments in favour of comprehensive reforms was precisely that early selection promoted the reproduction of social inequalities, and that highly segmented systems between baccalaureate and vocational training tended to reproduce initial class positions. The implementation of the comprehensive reform from 1990 onwards was very convulsive, for political and educational reasons. In the political field, the reform was driven by a social-democratic government that had an absolute parliamentary majority but encountered opposition from the conservative right that maintained a selective and meritocratic view of the education system. The political and social left was also opposed, seeing that the reform fell short of eradicating social inequalities through education. In the field of education, it soon became clear that a common curriculum is a very laudable objective, but difficult to apply in the educational practice of schools, due to the combination of three factors. First, a large proportion of the secondary teaching staff did not want or could not manage the new curriculum and the new didactic orientations derived from constructivism. Second, the dimension of young people who could not or did not want to study the same as all young people up to the age of 16 was not foreseen. Third, the majority expectation of families was that compulsory secondary education should prepare for the baccalaureate, and therefore the selective dimension prevailed over other pedagogical or social considerations. All of this led to "streaming" practices, the separation of groups by levels and curricular diversification, by means of facts in educational centres and by means of legislation in conservative government periods, which is why in Spain we can speak of a limited comprehensive secondary education. These imbalances led to an increase in education and in the inequality of educational opportunities by social origin (Fernández-Mellizo and Martínez 2017).

Another controversial point was the fit of vocational training with upper secondary education. With the idea of dissociating school failure from vocational training and increasing its prestige, even putting it on a similar footing to the baccalaureate, the 1990 reform imposed the same requirement for access to both the baccalaureate and vocational training: the diploma/graduate in secondary education. Higher vocational training for secondary school graduates was also created as an alternative to university. In practice, the image of the baccalaureate was reinforced, and inequalities in educational opportunities increased, since with increasing academic requirements, lower-class youth have fewer options (Martínez and Merino 2011). In recent years, there has been an increase in the number of connections between systems recovering from school failure and vocational training, which reinforces the image of the second path of vocational training but reduces the inequality between being inside and outside the education system.

In the labour and productive field, one of the main objectives of any educational reform is to bring professional training closer to the needs of companies and the productive fabric. In the reform of the 1990s, two important innovations were introduced in this vein. The first was curriculum design, which focused on specific competencies in the production or service sectors. The second novelty was the introduction of workplace training, or in-company internships, as it is popularly known. Although the Spanish business fabric has for centuries been distanced from the initial training of workers, data from some research point to a relative success in the placement rates and in the rates of adaptation from training to the labour market (Martínez García 2016). At the time of economic expansion the placement rate was so high that it was a reason for dropping out of school. For the management of the practices, collaboration networks have been created between training centres and surrounding companies, with the active involvement of the chambers of commerce. But even so, the discourse of the complaint about the inadequacy of vocational training has not diminished. Since 2012, dual vocational training, clearly inspired by the German model, has been promoted. It could even be said that more than inspiration it is a matter of directly imitating the Germanic model, even if only the device and structure of the training is copied, without copying the administrative, working and cultural environment. Some recent research is yielding uneven results from dual training in Spain, as it is only being developed in very specific sectors, multinational automotive companies or agro-industry, and is also very selective with the students who enter, so a higher placement rate would have more to do with this selection of students than with the benefits of the dual training model.

### 4.6 Brazil: A Maxi Educational Inequality

In the last 20 years, sociological and demographic studies have documented remarkable progress in enrolment rates in the Brazilian education system. This expansion began in the 1970s at all levels of education, from early childhood to higher education. As a consequence, as in other countries, there has been an increase in the
education of the Brazilian population (Hasenbalg and Silva 2003; Arretche 2015). Under the influence of the human capital theories of the 1960s, education, or rather the level of education, became the object of study for economists, influenced by the theory of human capital. From an instrument for the promotion of citizenship, education is now conceived as an instrument for the economic development of the country (Almeida 2008).

In a predominantly agrarian country of continental size, the main educational challenge of the 1960s was to reduce illiteracy and ensure access to primary school. In large Brazilian cities, access to school had become a reality since the early decades of the twentieth century. In rural areas, schools were scarce and required long walks. There was a shortage of schools, well-trained teachers and high failure and drop-out rates. In general, these conditions did not facilitate access to school for the poor, who live both in the countryside and in the big cities. ${ }^{2}$ The establishment of compulsory education in the national territory took a long time to materialise (1934) and the generalisation of access to basic education was even later (1990). These are milestones in the slow construction of the education system in the country which contribute towards explaining the late development in comparison with the countries of Western Europe and some Latin American countries, such as Argentina, Chile, Uruguay, etc. (Almeida 2017).

Today, $96.5 \%$ of Brazilian children between in the $7-14$ age group are enrolled in school. Despite remarkable progress in recent decades, access to early childhood and secondary education is far from satisfactory. $54 \%$ of children in the 4-6 age group (Schwartzman and de Moura Castro 2013) are enrolled in nursery school. The national net secondary school enrolment rate reached $56.9 \%$ in 2015. To grasp the evolution of access to the final qualifications of the education system, we must bear in mind that in 1980, the same rate was only $14 \%$. In part, national school enrolment rates remain low today because of the strong regional inequalities characterising the country. This is contrary to the more developed regions of the south and southeast to the north and northeast of the country. In Pará, the country's northern province, by $2015,44 \%$ of the population aged $15-17$ was in secondary school. In the same year, in São Paulo, a rich province in the south of the country, $73 \%$ of young people of the same age enrolled in this level of education. Therefore, national averages hide very different situations that vary significantly between different regions of the country and between different social groups.

For the Brazilian generations born up to the 1970s in the lowest extracts of the social structure, the absolute priority was work and survival (Linhares 2008). Secondary schools were scarce and for a long time were in the hands of private companies and concentrated in the big cities. Primary school failure rates, in turn, contributed to dropping out of school before reaching secondary school (Costa Ribeiro 1991). In 1985, when Brazil sought to deepen its democratic experience

[^3]after the military dictatorship, policies were implemented to curb school failure. These pedagogical devices that led to the decline in school failure have become conditions for international agencies, such as the World Bank, to provide funds. As expected, when failure rates declined, dropout rates also declined. This led to the influx of a larger contingent of young people into secondary school. According to IBGE (2020), in 1980, the net rate in national secondary school was $14.1 \%$. In 2000, the same rate jumped to $33.3 \%$. As a result, the formation of greater demand for higher education doubled in the 2000s.

### 4.6.1 A Triple Segregation

However, expanding access to Brazilian schools was not enough to reduce educational disparities, as it was done through very unequal school structures. Among the objective and symbolic subdivisions of the Brazilian education system, one of the main ones is the segmentation between public and private education. Official statistics, although imperfect, serve to scale the problem. Even today, approximately 80\% of the Brazilian school population is enrolled in public schools. However, this $20 \%$ of students from private schools ended up occupying $60 \%$ of seats in prestigious Brazilian public universities. In careers such as medicine, engineering and law, the proportion of private school students was even higher. Unlike Finland, in careers leading to teaching, school competition for entrance exams is less severe, resulting in a more popular student audience. Recent educational policies, such as the Quota Law (2012), sought to change this situation by instituting a reserve of half of the places in federal public universities for public school alumni. These educational policies of recent years have contributed towards reducing educational inequalities, although they have not been sufficient to eliminate them. Numerous studies recognise that the social position of families, geographic origin, gender and skin colour condition access and orientation within the Brazilian education system, from primary school to higher education. The possibilities of transition from one school cycle to another are extremely unequal if we look at the quartiles of income of the school population (Montalvão and Arnaldo 2014).

In Brazil's large urban centres, this reality is even more evident. There is a strong social and school segregation similar to that observed in many other cities of the world (Oberti 2007; Merle 2012). This school segregation reflects the distribution of social inequalities in the geographical space of the cities within the school. In Paris and Barcelona, the composition of the students of each school varies according to the neighbourhoods. This situation gave rise to the combination of residential and educational strategies of middle-class families and elite groups.

In the Brazilian case, the same phenomenon can be observed, significantly amplified by the financial-based segregation operated by private education. The demand for private education consists predominantly of middle- and upper-class families in large urban centres. In addition to this double social and school segregation, recurrent in so many other national contexts, in the Brazilian case there is also
segregation at the academic level. School performance is much higher in private education compared to that observed among non-critical students in public schools. For example, in the city of São Paulo, of the 200 schools with the highest performance in the National High School Exam (which corresponds to secondary school), only nine are public schools (Perosa and Dantas 2017). With few exceptions, ${ }^{3}$ it appears that Brazilian private schools, although quite heterogeneous, have the monopoly of school excellence in the country (Almeida and Nogueira 2002). Even if we consider that the parallel universes of public and private schools are internally heterogeneous, when one observes the distribution of grades in the National Secondary School Examination (ENEM) at the end of secondary school, the performance of private school students is much better than the performance of public school students. A minority of public secondary schools, to which access is mediated by selective entrance exams, presents the best school performance in the ENEM. Even so, they only represent $5 \%$ of the highest performing secondary schools in the country.

Brazilian public schools are home to families with fewer economic and social resources. These school structures suffer serious problems: teachers with low salaries, double or triple work shifts, large numbers of students per class. In the vast majority of cases, especially in large cities, such teaching units operate in three shifts of four to five hours in the mornings, afternoons and evenings. They bring together students between the ages of 7 and 14 and sometimes include students between the ages of 15 and 17 in the same school buildings. In the evening (from 7 p.m. to 10:30 p.m.), secondary education and adult education structures are held, even today, and are decisive for the reduction of illiteracy levels in the country and for the resumption of early interrupted education. Very unfavourable teaching and learning conditions predominate, the effects of which are felt in school performance. This is in stark contrast to the protected universe of private schools.

Historically, private education in Brazil grew with the arrival of Catholic religious orders, mainly from Europe. Thanks to Brazilian legislation and at that time, the state subsidy, huge educational efforts were made, aimed at ensuring the material survival of these orders in the country (convents, seminaries and private schools). This movement began at the end of the nineteenth century and in the first decades of the twentieth century. At that time, denominational schools and secular private schools run by European immigrant groups (Italians, Spaniards, French, Germans, etc.) gave rise to a solid school market, in which monthly fees can reach 1000 American dollars per month. The supply of private schools is rich and varied, with secular or religious schools, bilingual schools, with considerable variations in the pedagogical framework. They provide a tailor-made education that varies according to the economic and cultural resources of the different elite fractions (Nogueira 1998; Almeida 2009; Perosa 2009).

[^4]In the case of Brazil, the core subjects for all students finish prior to entering secondary school (aged 15). Vocational schools were phased out in the public sector, partly because of criticism that it was a lower education than regular secondary school. Today, vocational training at secondary level is dominated by private initiative and schools run by employers' associations. This vocational training enjoys great prestige among the families of the popular groups and tends to be avoided by young people with higher incomes and education levels (Tomizaki 2007; Schwartzman and de Moura Castro 2013).

Finally, public vocational training schools are today limited to Federal Institutes (IF), distributed across the country. To enter these vocational training institutes, students must sit school exams of varying degrees of selectivity depending on the location of the establishment. The Brazilian provinces have similar public and free vocational schools, of a good educational level, but they are quite selective. Part of the vocational training at secondary level is dominated by private initiatives and schools managed by employers' associations. This vocational training is renowned among working class families and it must be avoided by youths with levels of higher education (Tomizaki 2007; Schwartzman and de Moura Castro 2013). In general, vocational education has lost its prestige and the aspiration to go to university has become standardised. In this regard, the existence of a mass of private education establishments offering low-cost night courses, and sometimes distance courses, contributes to the hope of entering higher education. It is important to note that in a country whose population has a relatively low education level, despite the notable progress made, the rate of return of the higher education diploma is quite high (Almeida and Ernica 2015).

### 4.6.2 Higher Education in Brazil

Higher education in Brazil can only be understood in the context of the long history of the country that dates back to the condition of slave colony until the end of the nineteenth century. More recently, between 1960 and 1970, the country experienced strong economic growth combined with growing social inequalities. In the 1990s, a neoliberal agenda prevailed in the country (privatisation, precarious working conditions, reduction of the state, etc.). In this decade, however, there was widespread school education and control of inflation, a necessary condition for growth in the following years. The decade of 2000, on the other hand, was marked by the arrival to power of progressive and singularised political forces, and by years of economic growth combined with the reduction of social inequalities. That was until 2014, when the country entered a deep economic recession due to strong political conflicts that culminated, politically, in the dismissal of President Dilma Roussef. The economic recession meant social inequalities have grown again (Carvalho 2018).

The impacts of social inequalities on educational processes are widely recognised in specialised literature. As Christian Baudelot and Roger Establet (Baudelot and Establet 2009) argue, all over the world, without exception, student
achievement is associated with the socioeconomic level of their families. However, the intensity of this phenomenon varies substantially. In Finland, South Korea and Japan, this intensity is discrete.

Historically, Brazilian higher education was destined to the elites. Unlike the Spanish colonisation, which established universities in its colonies from the sixteenth century onwards, the Portuguese Crown prohibited the installation of universities in Brazil (Cunha 2016). At that time, a policy of granting scholarships to Brazilians who were entitled to enter the University of Coimbra was chosen. ${ }^{4}$ Sixteenth-century Spain already had eight universities. In comparison, Spain had a much higher literate population than Portugal. While Madrid could send teachers to the colonies without the risk of compromising its own universities, the same was not true for Portugal (Cunha 2016). Without attempting to reconstruct this long-term history, it is important to mention at least two waves of enrolment growth in higher education.

The first wave of expansion of higher education took place between 1960 and 1970, with an increase of 500,000 university students in the country. In Brazil, as in other countries of the world, these years were also characterised by the feminisation of the student population (Barroso and Mello 1979; Baudelont and Establet 1992). That number doubled again between 2000 and 2010. Its main characteristic was the arrival of women to university, in general, concentrated in "female careers", such as education, psychology, nursing, etc. The second wave of expansion in access to higher education in Brazil increased the entry of young people from families with low socioeconomic levels, thanks to an expansion programme in public universities that took place between 2003 and 2014. Many of these new universities were created in the north and northeast, far from the big cities, with the objective of promoting the access of segments of the population who until now had not been able to access university. Since 2012, the Quota Law has been in force, which reserves 50\% of the places in federal universities for students from public, low-income, black and Indian schools.

Although the expansion of Brazilian higher education was remarkable in the twentieth century, after a movement to spread global education, enrolment rates are still far below those of other countries, including Latin American countries. Between 2000 and 2010, Brazil's net rate of access to higher education doubled. However, it started from a very low level and even after the progression of the last three decades of the twentieth century and the 2000s, in 2018, the net rate of access to higher education in Brazil was $18.7 \%$, being quite unequal among the different regions of the country. If we look at the distribution of these rates among social groups, the maximum inequality characterising the country's education system becomes even more evident. The evolution of enrolment rates among the population between 18 and 24 years of age indicates that, in $2001,20 \%$ of the population with the lowest income represented only $0.5 \%$ of enrolment in higher education, reaching $4.2 \%$ in

[^5]2011, and among the richest $20 \%$ in the same period, this rate went from $22.9 \%$ to $47.1 \%$; similarly, the proportion of private sector enrolment was also much higher: this sector represents $75 \%$ and the public sector only $25 \%$ (INEP 2012).

According to UNESCO, in the last decade, Brazil has improved the proportion of the population between 25 and 34 years of age with higher education by 10 percentage points, from $11 \%$ in 2008 to $21 \%$ in 2018. Unprecedented educational policies developed in the 2000s, combined with a period of economic growth and reduction of inequalities, help to understand the greater investment by young Brazilians in extending schooling. The Quota Law (2012), on the other hand, by reserving half of the places in federal public universities for public school graduates, the population with the lowest socioeconomic level and blacks contributed significantly to reducing educational inequalities, although they still remain quite high.

### 4.7 Conclusions

To conclude, we present a brief summary of the educational results of each country and a general comparative assessment.

Since the early twentieth century the education level of Finnish people and particularly women have risen constantly. Today, women's educational level exceeds that of men and the majority of students in higher education and of university graduates are women. Compared to other European countries and other Nordic countries, women's attendance in higher education has a longstanding tradition in Finland.

The principal idea in the Finnish education policy has been to provide education to all regardless of their social origin, place of residence or gender. Educated citizens have been seen as a fundamental factor in nation building, development and modernisation of the society, a source of societal and individual well-being and as a producer of economic competitiveness.

The Finnish education system has been very successful. People in Finland are among the most educated people in the world. An average person in Finland is expected to undertake around 20 years of education, which is 3 years more than the European average (Statista 2019).

However, neoliberal tides in education policies have generated concerns about the equality of education in Finland. First, education level and choice of educational careers have become increasingly hereditary resulting in a halt in social mobility. Second, market-oriented education policies and reforms that emphasise personalised learning paths and expect pupils and students to be self-directed in their studies combined with severe budget cuts has increased inequalities among pupils and students. Not all have equal abilities to be self-directing and there is not enough personalised support for those who have challenges in learning, in language skills, cultural competences or social support. Significant differences exist in attitudes towards education, in learning opportunities and outcomes e.g. between boys and
girls, between original population and immigrants and between students in vocational and upper secondary education.

In the Spanish case, some fundamental questions are pointed out in the debate on educational policies in the management of social inequalities. It can be said that the political debate is situated in two axes, which we can call the axis of quality versus equity and the axis of citizenship versus human capital. To express it in schematic terms, the left-wing political and social bloc would commit to equity and citizenship, and the conservative socio-political bloc would commit to quality and human capital. Although with many nuances, which are beyond the scope of this text, these are the fundamental debates that also govern international bodies such as the OECD and the European Union, and the reforms and educational proposals emanating from these bodies. Some voices suggest that equity and quality can be achieved at the same time, but in practice demands for educational quality implicitly or explicitly lead to a reduction in equity at different levels of the education system. It is also true that there is no consensus on what equity and quality mean, let alone how they are measured. But in general, when equity in access is emphasised, for example, in the university, it is assumed that overall results may fall, which is one of the quantitative indicators of quality. And when higher quality is demanded in schools, it is implicitly or explicitly assumed that they have to be more selective, at least from the point of view of skills. It can be seen that quality and equity are not trade-offs, but they go hand in hand (OECD 2016). This is due to the fact that the weight of social origin is still so high that when the performance of students of low social origin is compensated, the average of the population improves, without affecting students of high social origin (Martínez 2017).

The second axis is the updated version of the school tension derived from the tension between capitalism and democracy, which has already been highlighted by thinkers such as John Dewey and the neo-Marxists Bowles and Gintis (1976) in the United States, or Carlos Lerena (1986) in Spain. The intersection between the social function (learning in a democratic, participatory and formally egalitarian context) and the economic function (learning for productive and selective performance based on capabilities) crosses educational policy debates, from basic education to higher education. Lower secondary education is where tensions and contradictions are most concentrated, since it is the link between basic and higher education in which students are obliged by law to remain in a unified school. But the liberal discourse of entrepreneurship and non-cognitive skills as new labour demands is permeating basic education. And at the university level this tension has generated student movements complaining about the progressive privatisation of university education, especially with the application of what is known as the Bologna process in the second half of the first decade of this century. However, it is paradoxical to claim for the university a space protected from knowledge not contaminated by spurious and materialistic interests, and at the same time increase concern for the future of the graduates, a future in which young people with less social capital will have fewer opportunities.

In a country like Brazil, made up of enormous geographic distances and a high concentration of income, the inequality in education has been historically very high.

This inequality has grown more since 2016, when the country plunged into a strong economic recession.

Since the 1980s, with the fall of the country's military regime, several educational policies have been applied with some success. The generalisation of access to primary school in the national territory was undoubtedly the first, as well as the increase in the compulsory school age, which since 2016 has been changed to 6 years. As a result, improvement can be observed in the main educational indicators of the country: reduction of illiteracy and the failure and dropout rates, increase in the educational level of the population and growth of the secondary school population. Educational inequalities lie less in the old division between "educated" and "uneducated" (Ringer 2003) and mainly in the orientation within the educational system. Leaving school to work, looking for a professional course or entering higher education are decisions that are far from being distributed randomly throughout the social structure.

The problems are complicated in secondary education and with considerable variations from the north to the south of Brazil. School dropout and work priority persist. The school offer in secondary school is guaranteed by public and private schools with quite uneven academic performance. In the big Brazilian cities, a segregation situation prevails: social and geographical, school and academic. Even vocational education is offered by very heterogeneous public and private institutions. There is porosity between professional and university education, accompanied by an overvaluation of the diploma of higher education. Many young people turn to good public vocational schools to prepare to enter higher education.

The rate of young people with higher education almost doubled between 2008 and 2018 and today $21 \%$ of the population aged $25-34$ have higher education. This rate varies greatly between the north and the south of the country. However, the increase in access to Brazilian higher education is due less to these educational policies aimed at promoting greater educational equity and more to the privatisation of Brazilian higher education. This is because more than $80 \%$ of higher education students in Brazil are enrolled in university centres, colleges and private universities. Public higher education is scarce. In 2015, $24 \%$ of university students were studying at a public university (Perosa \& Costa 2015). The great majority of young people access private higher education, composed of institutions maintained by large business groups or smaller colleges that attract the student population by offering evening courses, educational credit and, in many cases, thanks to distance learning.

The population with the lowest financial resources is targeted by private higher education, and their qualifications are strongly devalued in the labour market. The Brazilian case teaches that educational inequalities can be reduced as a result of educational policies clearly aimed at promoting equity. They are willing to mobilise all means and instruments to offer equal tools to young people for competition in the education system. More collective and solidarity-based forms of school competition have been reinvented, the greatest example of which was the Quota Law (2012), which allowed many children of domestic workers to have access to the most prestigious higher education diplomas.

The three countries selected show us three very internally complex and heterogeneous contexts, as well as contradictions and permanent reforms of their educational systems. In a first quantitative approach each country can be placed in a continuum of the education system that goes from most successful in terms of reaching a high level of education all across the population, in conditions of equity and facilitating youths' incorporation into the labour market, to least successful, with Finland and Brazil occupying either end of the spectrum respectively and Spain occupying an intermediate situation. Despite these differences, the three countries share certain tensions in their education system. On the one hand, the conception of education, ranging from more utilitarian, human capital theories, to the more humanist and civic-minded perspective. On the other hand, the challenge of comprehensiveness; in other words, the balance between a homogeneous education and a diversified education, between vocational training and a more academic path. In addition, there is the challenge of improving education while also improving equality.

The tensions differ from country to country, since their education traditions and cooperation and conflict strategies between the education agents vary, with varying levels of resources and different alliances with political actors.

Lastly, the global perspective of the three countries also serves to observe the level of discussion and variation in the consensus about the education system over time. Brazil represents an initial phase, with some setbacks, which, for example, have already been overcome in Spain (during the Franco dictatorship). Finland stands as an extreme case of an example to follow to reach the maximum education levels. However, it also demonstrates that the conquests and wide consensus attained by citizens can also be destabilised by educational reforms that introduce individualised principles instead of continuing to underscore criteria of collective equality criteria.
Appendix
Table 4.3 Trends in educational attainment at age 25-34, by gender (2008-2018)

Table 4.3 (continued)

Table 4.3 (continued)

|  | Notes | Below upper secondary |  |  |  |  |  |  |  |  |  |  |  | Upper secondary or post-secondary non-tertiary |  |  |  |  |  |  |  |  |  |  |  | Tertiary |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Men |  |  |  | Women |  |  |  | Total |  |  |  | Men |  |  |  | Women |  |  |  | Total |  |  |  | Men |  |  |  | Women |  |  | Total |  |  |  |
|  |  | 2008 |  | 201 |  | 20082018 |  |  |  | 2008 2018 |  |  |  | 2008 |  | 2018 |  | 20082018 |  |  |  | 2008 |  | 2018 |  | 2008 |  | 2018 | 2008 |  |  | 2018 | 2008 |  | 2018 |  |
|  |  | (1) |  | (2) |  | (3) |  | (4) |  | (5) |  | (6) |  | (7) |  | (8) |  | (9) |  | (10) |  | (11) |  | (12) |  | (13) |  | (14) |  | (15) |  | (16) | (17) |  | (18) |  |
| OECD average |  | 21 |  | 17 |  | 18 |  | 13 |  | 19 |  | 15 |  | 49 |  | 46 |  | 43 |  | 36 |  | 46 |  | 41 |  | 31 |  | 38 |  | 40 |  | 51 | 35 |  | 44 |  |
| EU23 average |  | 20 |  | 15 |  | 16 |  | 12 |  | 18 |  | 14 |  | 52 |  | 48 |  | 46 |  | 38 |  | 49 |  | 44 |  | 28 |  | 36 |  | 38 |  | 50 | 33 |  | 43 |  |
| Partners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Argentina |  |  | m | 32 |  |  | m | 24 |  |  | m | 28 |  |  | m | 33 |  |  | m | 31 |  |  | m | 32 |  |  | m | 34 |  |  | m | 45 |  | m | 40 |  |
| Brazil |  | 54 | b | 37 |  | 47 | b | 28 |  | 50 | b | 33 |  | 37 | b | 45 |  | 41 | b | 47 |  | 39 | b | 46 |  | 9 | b | 18 |  | 13 | b | 25 | 11 | b | 21 |  |
| China | 4 |  | m | 63 |  |  | m | 66 |  |  | m | 64 |  |  | m | 19 |  |  | m | 16 |  |  | m | 18 |  |  | m | 18 |  |  | m | 18 |  | m | 18 |  |
| Costa Rica |  | 62 |  | 54 |  | 54 |  | 48 |  | 58 |  | 51 |  | 16 |  | 21 |  | 17 |  | 21 |  | 16 |  | 21 |  | 23 |  | 25 |  | 29 |  | 31 | 26 |  | 28 |  |
| India | 5 |  | m | 58 |  |  | m | 70 |  |  | m | 64 |  |  | m | 26 |  |  | m | 18 |  |  | m | 22 |  |  | m | 16 |  |  | m | 12 |  | m | 14 |  |
| Indonesia | 1 | 72 | b | 48 |  | 75 | b | 51 |  | 73 | b | 50 |  | 21 | b | 37 |  | 17 | b | 31 |  | 19 | b | 34 |  | 7 | b | 14 |  | 8 | b | 18 | 8 | b | 16 |  |
| Russian <br> Federation | 1 |  | m | 5 |  |  | m | 3 |  |  | m | 4 |  |  | m | 39 |  |  | m | 27 |  |  | m | 33 |  |  | m | 56 |  |  | m | 70 |  | m | 63 |  |
| Saudi <br> Arabia |  |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m |  | m | m |  | m | m |  |
| South <br> Africa |  | 28 |  | 21 |  | 25 |  | 15 |  | 27 |  | 18 |  | 68 |  | 74 |  | 71 |  | 79 |  | 70 |  | 77 |  | 3 |  | 5 |  | 4 |  | 6 | 3 |  | 6 |  |
| G20 average |  |  | m | 27 |  |  | m | 25 |  |  | m | 26 |  |  | m | 40 |  |  | m | 34 |  |  | m | 37 |  |  | m | 35 |  |  | m | 41 |  | m | 38 |  |

Source: https://doi.org/10.1787/888933976365, OECD (2019)

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[^1]:    ${ }^{1}$ This is possibly due to the fact that access to education levels after the ESO requires the ESO graduate qualification. Likewise, the qualification of mid-level vocational training does not give direct access to the higher-level vocational training (Martínez and Fernández 2017; Martínez and Merino 2011).

[^2]:    Fig. 4.4 Percentage of variation in science performance explained by students' socio-economic status, 2015-2006. Note: Only solid color rectangles are statistically significant. Source: OECD (2016)

[^3]:    ${ }^{2}$ Even the cost of shoes was an additional difficulty for poor people living in the cities and countryside. Studies on the history of Brazilian education document this reality well. Hygienist principles guided the management of the Brazilian state. In this context, the barefoot child was seen as a potential transmitter of diseases. Consult, for example, Silva (2018).

[^4]:    ${ }^{3}$ The exceptions correspond to public secondary schools that hold an entrance examination and therefore select their audience from the school and social point of view (Basilio 2016).

[^5]:    ${ }^{4}$ When the Portuguese arrived in Brazil, Portugal had only two universities, the University of Coimbra (1290) and, later, the University of Évora (1559) (Cunha 2016).

