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RESEARCH ARTICLE

Adaptive responses to contextualised and differentiated school improvement. Identifying institutional profiles of secondary schools

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ABSTRACT

This paper reports a qualitative multiple case study of secondary schools that experienced sustained processes of quality improvement. We aimed to analyse the heterogeneity in school improvement processes and identify the factors and conditions contributing to this variation. We identified six dimensions to characterize different approaches to high school improvement: curriculum comprehensiveness, student selection/inclusion, student participation and youth cultures, leadership distribution, community openness, and market situation. Based on our cross-case analysis, we proposed an empirically grounded typology composed by four high school profiles: i) traditional academically oriented public high schools; ii) comprehensive high schools from small communities; iii) restrictive metropolitan popular high schools; and iv) vocational high schools. We show the implications of this typology for understanding how high schools actively relate to both their contexts and educational policy, and 'translated' these external pressures into idiosyncratic responses. We found that key educational decisions such as curricular approaches and the various emphases placed on learning by high schools, the type of organisational leadership or degree of openness to youth participation, were linked to more structural decisions made by schools regarding their position in the local educational market, their degree of selectivity, and the type of relationships established with their environment.

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Introduction

The literature on school improvement and effectiveness has accumulated a large amount of evidence, although its generalisability in different educational settings has been questioned (Lupton and Thrupp 2007; Thrupp, Lupton, and Brown 2007). In the pursuit of identifying common processes and factors contributing to school improvement, research has often overlooked the role of context, both social and institutional, and its interaction with the institutional diversity of schools. This is

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particularly significant in the case of secondary schools since they have specific curricular and organisational characteristics that require attention and indicate a greater need for sensitivity to heterogeneous contexts compared to primary education. While certain patterns and key factors in school improvement are well-documented, there is no singular path to achieving it. Understanding the ways in which this variation is produced and expressed is crucial for fostering school improvement processes that are relevant to diverse realities. This article seeks to contribute to this understanding, presenting the results of an empirical study on high school improvement in Chile.

The contemporary secondary school is stressed by trying to reconcile traditionally opposed principles: it claims to be meritocratic, but also compensatory; universally socialising, but also selective for tertiary education. These tensions are linked to the expansion of secondary education, since many perceived the massification of secondary school as a decline in academic standards to accommodate students with limited motivation for rigorous study and low family cultural capital (Bourdieu et al. 1999). Massification produced the diversification of students' youth interests, identities, and cultures, creating a tension between school culture and youth culture, enormously diversified by the social and consumer conditions of contemporary society (Levinson 2012), becoming one of the most complex organisational and pedagogical challenges of secondary schools.

Some studies reported how massification led to significant diversification in the 'secondary school experience' due to institutional responses addressing population heterogeneity, including social class, gender and race (Powell, Farrar, and Cohen 1985; Dubet 1991; Bonal 2005). While others focused on how to prevent curricular differentiation (typically between comprehensive and vocational curriculum) from becoming socio-educational segmentation, with students of lower socioeconomic status overrepresented in vocational education (Kerckhoff 2000). More generally, ability grouping, including tracking, has sparked significant controversy due to its potential stigmatising effects and the perpetuation of inequality among students (Chmielewski 2014).

Thus, there is no 'the' secondary school, but rather many ways of organising and living the experience of secondary education. The research on high school improvement must consider the heterogeneity of the curriculum, institutions, community context, and the student population. This is the approach we adopted in this paper. Drawing from a multiple-case study of secondary schools engaged in improvement processes spanning at least a decade, we present an empirical typology comprising four distinct institutional profiles: i) traditional academically oriented public high schools; ii) comprehensive high schools in small communities; iii) restrictive metropolitan popular high schools; and iv) vocational high schools. We analyse the implications of this typology for understanding how high schools actively relate to both their contexts and educational policies, and how they 'translate' these external pressures into idiosyncratic responses across key educational dimensions, including curriculum, pedagogy, school management, school climate, student inclusion, student participation, and youth cultures. We believe policy makers and school leaders should consider these adaptive responses that result in contextualised and differentiated school improvement to effectively support high schools in developing their institutional potential.

After this introduction, we provide an overview of secondary education in Chile; next, we review the literature on school improvement in secondary education, looking for key elements to characterise the processes of change and improvement experienced by the studied secondary schools; later, we explain our methodological approach, which involves a multiple-case study; then, we synthesise the main findings of our research, with a focus on our typology of secondary schools; lastly, we conclude by reflecting on the change and improvement of contemporary secondary schools.

Characterization of secondary education in Chile

Secondary education extends in Chile for 4 years (after 8 years of primary education). Since 2003, it has been compulsory and now covers nearly 90% of the age group, with graduation rates exceeding 90%. Institutionally, secondary education is segmented into comprehensive schools, offering a 'scientific-humanist' curriculum (SH), and vocational schools, which focus on a 'technical-professional' curriculum (TP) (some 'polyvalent' schools offer both curriculums). Both branches share a common curriculum for the first two grades and then specialise for the last two grades. Approximately 30% of students attend vocational schools, strongly biased towards the lowest socioeconomic groups (Ministerio de Educación 2019).

Secondary education is heavily privatised in Chile: only a third of young people study in a public secondary school. However, most private schools are financed by the state, so more than 90% of secondary school students attend schools with public funding.[1] Chilean secondary education also presents a high social and academic segregation of its students (Bellei et al. 2015).

Chilean secondary education has undergone relevant and continuous changes in the last two decades, and is facing increasing pressure from 'school improvement' initiatives, including: i) the increasing importance of standardised academic achievement tests due to a new high-stakes accountability system and university admission testing; ii) successive curricular changes and the subsequent updating of study plans; iii) increasing elimination of academic requirements for admission to secondary schools, and their replacement by a centralised school admission system, based on parents' school choice (with random assignment in cases of over-demand); and iv) some improvement policies, such as the switch to a full school day, or direct intervention in low-achievement secondary schools (Bellei et al. 2021).

Nevertheless, despite those efforts, the average performance in Chilean secondary education, as measured by national (SIMCE) and international (PISA) achievement tests, remains relatively low. For instance, PISA 2022 data revealed that a third of 15-year-old students fail to reach the basic level (level 2) in reading or science, while in mathematics, half of the students fall short of this basic standard. Available evidence indicates that -on average- students' achievement did not increase in the last decade, although in the early 2000s it showed significant advances (Mineduc 2010). Certainly, some secondary schools managed to make significant improvements during the same period. According to our estimates, between 2001 and 2014, approximately one in ten secondary schools significantly enhanced students' performance (Bellei et al. 2021). We studied a sample of those improving high schools.

Key dimensions of school improvement in secondary education

In this section, we briefly discuss evidence regarding secondary school improvement. Our aim is to identify key aspects to consider in our empirical research, with a particular focus on the institutional diversity of secondary schools.

The importance of context for secondary schools

After their initial emphasis on 'the school', studies of school improvement had to pay more attention to the context, considering social, political and cultural aspects in which school communities operate (Reynolds and Clarke 2014; Thrupp, Lupton, and Brown 2007). The context significantly influences both the potential for improvement and its sustainability, since schools are influenced by external factors that affect the educational offering and the effort required to achieve high learning achievements (Bellei et al. 2015; Harris et al. 2006). Because educational policies in secondary education have been less intensive, high schools rely heavily on their internal capacities and productive relationships with higher education institutions and the labour market (Stringfield, Reynolds, and Schaffer 2014).

Hargreaves and Goodson (2006) raise the need to consider the political and historical aspects that affect high school improvement and its sustainability, among which are reform cycles and frequent and contradictory changes in policy orientations; demographic changes of student population; generational changes in teachers; and changes in the relationships between schools in a given educational market. Thus, school context is dynamic and interacts with the internal capacities of the schools and their different stages of development. High schools can turn these changes into resources for improvement, connecting internal and external agendas, to build links and social capital beyond the school, with universities, companies and their local community (Gu and Johansson 2013).

Additionally, secondary schools located in socially disadvantaged contexts face social problems, such as violence, difficulties in retaining teachers, greater student mobility, and the influx of students expelled from other schools. These factors collectively hinder the initiation and sustainability of improvement processes (Harris et al. 2006; Nicolaidou and Ainscow 2005; Muijs 2007). Furthermore, in educational systems that emphasise competition and school choice (as in Chile), heightened competition for resources and the trend towards social and academic segregation result in less prestigious schools enrolling students with greater challenges while having fewer resources to educate them (Bellei et al. 2015; Leithwood, Harris, and Strauss 2010). As a result, many high schools develop a strained relationship with their surroundings and are isolated from their local community.

Enrichment and personalization of the curriculum and pedagogy

The curriculum is central to improving secondary education (Preston et al. 2017). Improving schools try to respond to the different needs and interests of their students, offering a relevant, attractive, and diverse curriculum, which includes specialised courses that motivate students in their educational journey (MacBeath et al. 2007; West, Ainscow, and Stanford 2005). In advanced stages of improvement, curricular

personalisation and diversification is provided, including differentiated support and a high degree of electiveness (Day et al. 2011).

A particularly complex challenge in secondary school is to ensure students to enjoy the learning process. Some innovative schools work flexibly, with a curriculum focused on the development of skills, based on research projects that cross several subjects, pedagogical outings, and learning outside the classroom (Day et al. 2011; Harris et al. 2006; Mehta and Fine 2019). The challenge is to produce 'ambitious teaching' that simultaneously integrates deep learning, intrinsic motivation and creativity, which implies the capacity for original production or action by students regarding what they have learned (Mehta and Fine 2019). Evidence shows, however, that this balance rarely occurs, and curricula tend to emphasise only some dimensions: in vocational education, students focus on practical 'know-how,' while in pre-university education, the emphasis is on conceptual learning.

At the pedagogical level, improving schools are characterised by a strong emphasis on high-quality teaching with different approaches, combining individual and group work, greater spaces for discussion, learning based on research, formative evaluation, feedback to students, and active student's participation (Preston et al. 2017). Some schools incorporate flexibility to optimise teaching time, or work in thematic subject blocks. Teachers in these schools use authentic activities that are relevant to the students' lives, making teaching more meaningful and emphasising higher order thinking skills (Rutledge and Canatta 2016). Certainly, many times these innovations occur only in elective curricular activities, such as complementary workshops or academies (Mehta and Fine 2019).

Institutional and pedagogical leadership in secondary schools

Leadership presents some singularities in secondary schools. According to Day et al. 2011, high school principals differ from their primary school counterparts in the extent of distributed leadership, particularly in the greater shared responsibility with middle leaders. Thus, high school principals often exhibit less direct instructional leadership and rely more on mediation by other leaders, such as department heads or experienced teachers (Robinson, Lloyd, and Rowe 2008). Research emphasises the significance of departmental work for improvement in secondary education (Harris et al. 2006; Stringfield, Reynolds, and Schaffer 2014; West, Ainscow, and Stanford 2005). Certainly, this causes high schools to be made up of sub-cultures associated with departments, which operate as an intermediate level between school and classroom (Harris 2001; Ko, Hallinger, and Walker 2015; MacBeath 2007).

High schools that improve promote department leaders by assigning new responsibilities, which relates to the greater disciplinary complexity of secondary education curriculum and pedagogy (Day et al. 2011; Preston et al. 2017). Teachers often feel more identified with their departments than with the school itself, making department leaders better positioned to provide support and guidance to teachers (Highfield 2010; Leithwood 2016), including generating a climate of exchange; planning and coordinating the curriculum; fostering teachers' professional development, and eventually assessing their work (Harris 2001).

School culture, well-being, and student interests

Research has consistently shown that school culture is a key element in understanding change and improvement (M. Lee and Seashore 2019). Higher-performing schools are characterised by high expectations for both students and teachers, fostering student responsibility for their own learning and a collaborative culture among teachers focused on student achievement; high commitment, motivation and cooperation among all school members; a learning community among teachers; and high interpersonal trust and respect (Seashore Louis and Lee 2016; Tichnor-Wagner, Harrison, and Cohen-Vogel 2016). Concern for school culture also implies developing a welcoming environment for students, based on permanent listening to their points of view, and concern for their interests and needs. This emphasis is developed in formal and informal spaces, taking care of both individual and collective aspects (West, Ainscow, and Stanford 2005).

Several studies have shown that students who feel a sense of belonging to their high school and experience positive and meaningful relationships with adults and peers are more persistent, motivated and committed to their learning; thus, when teachers are concerned about the well-being and educational success of their students, it produces a positive school climate that improves student participation (V. E. Lee and Smith 1999; Rutledge et al. 2015; Walker and Greene 2009).

Young people currently face a complex context for their socio-emotional development. The psychological challenges during this stage of life have significantly increased, driven by risk factors such as cigarette, alcohol, and drug use, as well as exposure to violence (MacBeath 2007). In this sense, socio-emotional well-being, the protection of young people inside and outside the school space, and the work on non-cognitive skills are at the centre of the concerns of improving high schools (Day et al. 2011; West, Ainscow, and Stanford 2005). The literature also shows the importance of providing vocational guidance on the future aspirations of young people, continuity of studies and job placement, to consolidate their life projects (Day et al. 2011; MacBeath et al. 2007).

In addition, extracurricular activities play a very important role in establishing close relationships between students and teachers. Evidence shows that students who participate in sports and volunteer activities are more likely to graduate from secondary school and enter university, acquiring social capital and developing supportive relationships with other members of the school community (Feldman and Matjasko 2005; Peck et al. 2009).

In summary, we identified several key areas in the literature that we then used to guide our empirical inquiry into high school improvement processes. In particular, we placed special emphasis on i) the quality of the high school's relationship with the community and institutional context; ii) the intensity of market competition in which the high school is situated, an especially relevant issue in the Chilean context; iii) the type of curriculum offered by the high school, characterised by its degree of breadth or specialisation; iv) the degree of selectivity or inclusivity of the high school's educational proposal; v) the type of leadership and organisation of the high school; and vi) the sensitivity and attention that the high school pays to youth culture and interests. Our study allowed us not only to observe these dimensions in an interrelated manner across various cases of sustained school improvement but also to identify tensions and different ways to resolve them, thus shaping heterogeneous institutional approaches to school improvement.

Method

General approach

This paper is based on a multiple case study (Creswell 2007; Stake 2006) conducted to develop empirically-based hypotheses about the heterogeneity of the patterns of school improvement in secondary education, as well as the contextual and institutional factors that affect these improvement processes (George and Bennett 2005). Specifically, the 'case' was defined as high schools that steadily improved their educational effectiveness for over a decade, starting from different initial performance levels. Applying empirical and theoretical criteria, we implemented a purposive sampling method (Creswell 2007; Merriam 2009) to compose a heterogeneous sample of twelve high schools. We conducted a qualitative case study of each high school, performing in-depth within-case analyses. Subsequently, we implemented cross-case analyses based on horizontal comparison for theory building, resulting in the inductive development of a typology of high schools engaged in improvement processes (Barlett and Vavrus 2017; George and Bennett 2005), which is the focus of this paper.

Sample

As mentioned, we implemented a purposeful sampling strategy and sequentially applied empirical and theoretical criteria to select the high school cases to study. First, to identify high schools that had experienced sustained school improvement processes, we developed an educational performance index (EPI) with which we estimated the effectiveness trajectory followed by Chilean high schools for more than a decade, adapting a methodology previously applied to primary education (Valenzuela, Bellei, and Allende 2016). Essentially, the EPI combines (by means of a factor analysis and giving a stable weight to each variable over time) a broad set of school achievement indicators at the secondary education level, specifically: the SIMCE 10th grade average in reading and mathematics; the percentage of students that attain the sufficient level of performance SIMCE 10th grade in reading and mathematics; the internal variation of SIMCE 10th grade results in reading and mathematics; the 'school effect' for SIMCE in reading and mathematics, estimated by a multilevel regression that control for observable characteristics of students and schools (including the socioeconomic composition of the students and the selectivity of the schools); the annual repetition rate; and the annual school retention rate. The EPI was estimated for all Chilean high schools with complete information for the entire period (2,122 schools, 71% of the total).

We estimated that 10.9% of Chilean secondary schools significantly and consistently improved their performance between 2001–2014. Then, within this group, we applied additional theoretical criteria to select cases of school improvement that are as genuine and comprehensive as possible, including schools that are comparatively unselective in their admission processes, which reach a basic level of educational performance, and that educate students of medium or low socioeconomic status. Thus, we reduced the potential universe of 232 high schools to 35. Among them, we finally selected 12 schools based on additional criteria of interest. These criteria included schools that were either free or low-cost for families, schools that demonstrated achievements beyond those considered in the EPI (such as university admission rates, graduation rates, and personal and social

development indicators), schools with varying starting points in terms of their initial performance, and schools that exhibited diversity in institutional characteristics, geographical location, and curriculum. Since we aimed to study high school improvement in various contexts and institutional settings, we selected a sample that would provide maximum variation in cases of the phenomenon of interest (Creswell 2007; Merriam 2009). The final sample consisted of nine public high schools and three private ones; seven SH secondary schools, four TP and one Polyvalent; four of low socioeconomic level, six of low-medium SES level and two of medium SES level, two located in the north of the country, three in the middle, four in the south and three in the metropolitan area of the Chilean capital. See the Appendix for additional details of the sample.

Data collection

The data collected aimed to provide both a comprehensive understanding and a detailed description of high school improvement processes. To achieve this goal, various techniques and multiple sources were employed (Bryman 2012; Creswell 2007). Each of the 12 case studies was based on intensive field research, whose main focuses were the institutional and local context of the high school, its history, institutional management and pedagogical-curricular management, coexistence and organisational culture, the pedagogical work in the classroom and outside of it, the characteristics of teachers and students, the processes of change and improvement in the last decade, and achievements in different educational dimensions.

The fieldwork was carried out by teams of two researchers during 2016 and 2017, and included a range of 13 to 25 semi-structured individual interviews (including at least the director, academic head, head of department, head of coexistence, student council advisor, teachers, vocational counsellor, psychologist, school owner, students, former student, parents, and external key informant) and 7 group interviews (three with teachers, three with students, and one with parents). These included a collective workshop with former and experienced teachers from each high school to reconstruct its recent history. Also, we applied a student survey on classroom processes, semi-structured observations of school and classroom dynamics, and the analysis of records, institutional documents, and statistics. The inclusion of secondary sources was particularly useful for studying the evolution of the high schools during the last decades and reconstructing their improvement processes. Fieldwork data collection processes were later complemented with focused visits by researchers, pers. comm., and email consultations to complete or specify information.

Data analysis

The empirical material was analysed in two stages. The first stage involved the production of individual case studies, while the second stage comprised a horizontal comparative cross-case analysis (Barlett and Vavrus 2017; Stake 2006).

In the first stage, each pair of researchers thematically coded their empirical material using a common basic matrix of codes derived from the foci of inquiry (Bryman 2012; Merriam 2009). They were also free to produce their own codes inductively to accommodate the specificity of their cases. Analytical memos were produced in the initial stages of the analysis. They were then presented and discussed with the entire research team to

refine the interpretative hypotheses of each high school's improvement processes. After coding and analysing the empirical material, the researchers produced case study reports that provided in-depth descriptions of the changes experienced by high schools over the past decade. The reports included an analysis of the factors and conditions that explained the improvement processes, along with interpretive hypotheses about each case. Special emphasis was placed on the relationships between different levels (policies, context, and high school) and dimensions (social, cultural, and educational).

The second stage consisted of a horizontal analysis of the cases (Barlett and Vavrus 2017; Stake 2006). This stage identified common patterns and specificities that account for the diversity of approaches to school improvement. The conceptual analysis of these cross-case comparisons enabled the development of four institutional profiles of high schools (George and Bennett 2005), representing different approaches to addressing the challenges of school improvement. Given the relevance of heterogeneity in the academic literature and in the 12 cases studied, we developed a typology of high schools on improvement processes. This paper presents the results of this cross-case analysis.

Findings: four profiles of secondary schools facing the challenge of improvement

Based on key issues identified in the literature review, we defined six dimensions to generate a typology of secondary schools in the process of school improvement:

(1) The more open or closed relationship that the school establishes with the community, universities, and companies.
(2) The school curricular proposal, rather broad, comprehensive, and flexible, or with a specialised and rigid curriculum (either academic or vocational).
(3) To what extent the educational proposal of the school is for all students or rather focuses on a subgroup (i.e. according to their school performance, aptitudes, or educational-labour projection.).
(4) The type of institutional and pedagogical leadership, more distributed (with teacher leadership) or more hierarchical.
(5) The approach of the school in its relationship with young people, in terms of the degree of participation and prominence given to students, and attention to their socio-emotional needs and the construction of their life projects.
(6) The situation in the school market or the level of competition school face, from secondary schools that are virtually the only ones in your territory to those located in highly populated metropolitan areas and are part of highly dynamic local school markets.

As we will show, there is room for different approaches to each of these dimensions, which produces significant heterogeneity between secondary schools. Thus, we grouped the case studies into four institutional profiles: academically oriented traditional public high schools; public high schools of small communities; urban-popular metropolitan high schools; and vocational high schools. Next, we present our findings by describing and analysing each institutional profile, emphasising their approaches to school improvement, both institutionally and contextually.

Traditional academically oriented public high schools

The first profile consists of two academically oriented traditional public high schools with historical significance for their cities. This relevance is expressed in its large size (both schools have more than 1,000 students) and better academic performance than their peers, all of which is even more meritorious in a period of strong deterioration and stigma of public education in Chile.

Academic achievement as first priority

Historically, these schools have been oriented to ensure that their students access university studies, so their prestige depends on maintaining a high academic performance (Seashore Louis and Lee 2016). Consequently, their achievement indicators are fundamentally related to university admission tests. The prestige based on academic achievement motivates and increases the sense of belonging and commitment of students, while teachers, administrators, families, and the general community recognise in these high schools a vehicle for social mobility. The teachers develop a strong commitment to educate academically ambitious students. Thus, the hallmark of these schools has been to embody meritocracy in public education through its selective, academic and competitive nature. By educating mainly students from the lower-middle class, the exceptionality of their career and the meritocratic sense are reinforced, and the students perceive themselves with characteristics that differentiate them from their former primary school classmates.

> The whole purpose of this high school is that we go to university. That is why they demand a high level from us, so that at university we won't find it so difficult. Besides, we get unconditional support from all the teachers. (Student Council, K)

In addition to their primary focus on academic achievement, these schools aim to provide comprehensive education through a wide range of workshops and academies during the school day, as well as extracurricular activities, particularly in sports, arts, and culture (Feldman and Matjasko 2005). They also place emphasis on maintaining a positive school and classroom climate, which is an integral part of their culture. This emphasis has been reinforced in response to the challenges posed by massification and reduced selectivity.

> [What is the school's hallmark? What distinguishes it from others?]
>
> I think it's academic excellence; the community stands out for that (. . .) I remember last year we discussed the issue a lot, and we said 'we have to soften the standards', as new times are coming, we have the upcoming Inclusion Law, and we need to be open to that. Our hallmark cannot be only academic excellence. So, it was decided as 'educating with excellence and self-efficacy'. (Director, F)

Multiple efforts to maintain the prestige of public "high school of excellence"

The weakening of Chilean public education in recent decades has also affected these high schools, forcing them to develop various efforts to maintain their historical prestige. A crucial change occurred when these schools became co-educational during the 1990s and early 2000s (traditionally they were exclusively for men), which significantly

improved their academic performance; likely because this change attracted to a greater extent female students with higher motivation and achievement. These schools have taken advantage of the few national policies aimed at improving secondary education, but they have also faced recent challenges due to the potential impact of the Inclusion Law (2015), which seeks to end the academic selection of students, a mechanism that some school actors considered essential for the adequate development of their institutional educational project.

> Going co-ed was a very positive change, even though there was resistance among teachers, given that for many years the school had been only for boys. The girls brought new life to the school because they began to empower it again, improving all indicators: grade repetition, promotion, dropout, enrolment. (External informant, K)

Certainly, the sustained high academic achievement observed in these high schools, even after eliminating or reducing the academic selection of students, reinforce the notion that this is not explained only by selection, but by internal quality processes. Teachers hold high expectations for their students' academic achievement, who in turn have a strong commitment and motivation for good performance, which is a virtuous circle that makes it easier for teachers to teach challenging classes and get more out of students (Tichnor-Wagner, Harrison, and Cohen-Vogel 2016). Although the historical foundations of this greater student commitment would be in the academic selection and the prestige of the schools, currently it seems to be sustained by the high social value attached to the opportunity to access them, as well as the recognition of the good academic level, infrastructure conditions and equipment, the diverse offer of extracurricular activities, and the close teacher-student relationships, in a context where opportunities for quality secondary education are relatively limited.

A community of teachers that supports the educational project

In these high schools there is a strong identity and professional culture of their teachers, and a high commitment to the school educational project (M. Lee and Seashore 2019). Beyond the leadership of their principals (who have changed frequently in the last fifteen years), it is the community of teachers that has given consistency to the work and has been the support to address the continuous institutional challenges. Teachers, usually organised into strong disciplinary departments (Harris 2001), have high leadership, a sense of collective self-efficacy, and high expectations for their students: they believe their students can succeed in prestigious universities, and that is what they work for.

> At the end of the day, the teachers are the ones who make this community work. There's a lot more extra work involved, which takes up the teacher's free time, because there isn't enough time at the school to do everything. Many times, you go to bed at two in the morning checking tests, preparing handouts. . .. (Teachers, F)

Consideration of the interests of young people

Students identify with their high schools and feel supported by their teachers both academically and personally. In general, these schools enjoy good coexistence and a climate of trust among school members (van Maele, Forsyth, and van Houtte 2014).

> In this high school teachers are close to the students and the classes are always done with the objective that students understand and learn from their mistakes. The environment facilitates this because there are no important cases of bullying or harassment at school" (Students, K)

However, the arrival of a new profile of students (since the elimination of admission barriers), who differ from the traditional student of academically selective high schools, has challenged these schools. In response, they incorporated, unprecedentedly, guidelines and practices of socialisation into the school culture, a process that has not been without tension. Youth cultures and young people's interests are channelled institutionally through a rich offer of extracurricular activities and instances of political participation, facilitated for the large size of these high schools.

> [Do you think the school has some curricular innovations?]
>
> Yes, from the point of view of the curriculum. . .we asked our students what they wanted to do with their time, and there were many requests for artistic, sports, musical, instrumental, theatrical activities. . .. . . as a matter of fact, now, from nineth to eleventh grade, there is an elective with three options, one of them is theatre, the second one is instruments or music, and the other one is recycling. Robotics was incorporated in 10th grade and in 11th grade, mosaic and 12th grade they can choose between arts and crafts, handicrafts or debate, advanced English or Mandarin Chinese. . .. (Academic coordinator, K)

Also, the tradition of doing politics has been maintained and fostered, which has favoured the emergence of student leaders at the local level. However, the instances of participation and deployment of youth cultures are not much more welcome outside these institutional spaces, while students perceive that excessive concern for academic performance stresses and restricts the development of these areas (Levinson 2012).

Comprehensive high schools for small communities

This second profile is made up of three high schools that share some structural characteristics: they are all public schools, from small cities located in rural communities; its students are of low or medium-low socioeconomic level; all have a scientific humanist curriculum and prepare their students for post-secondary studies.

Community high schools oriented to good education for all

These high schools are the first in their cities, and they have enormous roots in them, benefiting from a local culture, a sense of belonging, and a collective identity whose bases are genuine in the surrounding context. They are virtually the only high schools in their territory and do not face direct competition from private subsidised schools. The local community has produced the school community: most of the children of the community, local authorities and small farmers, children of public servants and teachers, former students, neighbours and relatives, all go to the same high school. Many teachers and civil servants are also alumni. These schools are open to the community and the social life of the area is projected; also, various activities that go beyond the educational service are carried out in the school facilities. They are schools with enormous social capital.

> We are alumni here. We know the school's reality, which makes us willing to go the extra mile. So, it is like a different kind of affection for the school. When I first came here, I taught my cousins, my neighbours. (Teacher, E)

This fact has important and multiple ramifications. Teachers and school staff work with remarkable commitment and feel supported and respected by their communities and students. They work with a clear sense of mission, and the results are reflected in their family, friends and neighbours. Furthermore, they see their job as caring for and advancing the local community, which increases their sense of responsibility.

> Everyone, everyone [attends this school]. All the people come together here, there are no social differences (. . .) this high school is a reference point for the whole community, it is a heritage of pride. (Head of Municipal Department, G)

The cultural continuity between the school and the community reinforces the educational process. The families support the high school; they feel it is theirs, and they are proud of it. This community closeness also produces some social control over the teachers, who feel highly observed and exposed to the public, because 'everyone knows each other, and everything is noticed'.

Being 'the' high school of the community also implies that they are non-selective institutions, welcoming all students from their areas. This is why they educate a highly diverse student body in terms of social composition and academic performance, but also motivations and interests. Thus, they offer preparation workshops for the demanding university admission exam, and simultaneously they have school integration programmes and other reinforcement programmes for students with very low performance or learning difficulties. Also, in addition to the comprehensive curriculum, two of them offer vocational education. The elective academies and workshops serve as spaces to accommodate this diversity, offering a wide variety of artistic, sports, scientific and humanistic disciplines.

> You realise that you don't necessarily have to have funds to have a good education. Here, you have the opportunity to develop your skills according to your taste without paying as much as students in a private school would. In this school, if you want to play an instrument, they lend it to you so you can take it home. (Student, G)

Professional and institutional commitment for comprehensive education

These schools also share a genuine concern for offering a comprehensive quality education to their students, although they have made uneven progress in the effort (Schiro 2007). Most have designed their own study plans, creating their curriculum; they use more active pedagogies; and they have thematic classrooms, academies and offer many elective workshops for students. Certainly, all of them prepare their students for external standardised assessments, but there is no excessive focus on these tests, and we did not observe a curricular narrowing linked to test preparation.

> The bulk of our good results is down to the daily work of the teacher; that is to say, with or without SIMCE, the school's performance would be similar. We don't compromise on our curriculum for scheduling test preparation during class time. (Director, E)

To improve, these high schools have effectively taken advantage of educational policies. All value and efficiently manage the increase in resources provided by the Full School Day (extended hours), the Preferential School Subsidy (additional financing for low SES students) and, more recently, the School Integration Program (for students with special educational needs), so that their students have more school time, more specialised professional support and more learning resources at their disposal. A student talks about the changes he has seen in his classroom regarding the implementation of the integration programme in his school.

> I mean, in the past, there was just one teacher in the classroom, and everyone had to pay attention to them. It didn't always work out well. Now, there are two: the teacher in charge of running the class and a support teacher who moves around the room to help students with any questions, so that helps. (Student, I)

Finally, in these schools there are collective teacher work practices, where they share ideas related to teaching planning and didactic materials and discuss pedagogical issues. Among school's leaders and teachers, there is a consolidated discourse on the professional autonomy of teachers (not so much as individuals, but as a teaching body) and high degrees of trust between them.

> In my view, the good results we achieve in mathematics are down to the teamwork we do. We're always talking about what methodology works better in a class, what type of content we're looking at, and how best to present it. (Teacher, E)

Closeness to students, but low promotion of youth cultures

Another important aspect of being in a small city is the stability in the type of students attending the high schools. Teachers and principals feel close to the primary schools in their community: there is coordination, joint work, information, and even shared personnel. Thus, for these high schools, the students who will enrol are not strangers to them because they are familiar with their communities and the schools that educate them.

> One way or another, their family knows us, and we know them. Students know the teachers before they start, and they'll bump into them in the supermarket, in the hospital, everywhere. So it's not someone unknown or superior, but someone who's just like them. (Teacher, E)

The school-community proximity also results in the relative absence of major coexistence problems. On the contrary, given the traditional peasant culture that they inherit and the characteristics of small towns, the students are respectful of the institution and the teachers. Teachers perceive that their students are free from many risk factors associated with large cities, such as drugs and violent behaviour, which makes it easier to resolve issues of coexistence and discipline (Thrupp, Lupton, and Brown 2007). The peasant culture, however, also explains a tendency towards somewhat paternalistic and traditional teacher-student relationships, with low possibilities of expression and promotion of youth cultures. Being inserted in very traditional communities, these high schools still have resistance to accepting LGTBI identities and affectivities, and, while instances of political participation such as the

student council exist, there is no substantial promotion of students' voices, resulting in low levels of student political participation.

Metropolitan high schools of poor neighbourhood

The third profile of high schools in our sample consists of three metropolitan schools located in poor neighbourhoods within highly dynamic school markets. Motivated by the idea of developing life projects different from those imposed by the environment and the social origin of the students, these schools build a wall to protect themselves and differentiate themselves from the precarious context. They aim to be attractive alternatives for families in the competition for students and offer complete schooling from pre-kindergarten to 12th grade. To achieve this, they work to excel in the rankings of the official SIMCE test and to be perceived as environments of order, discipline, and security, especially in contrast to areas seen as highly risky.

Academic model based on preparation for standardized testing

In terms of the curriculum, external standardised tests are regarded as the primary indicators of students' educational achievement. As a result, they play a significant role in guiding and organising the curriculum and pedagogical work of these high schools. The most salient focus is to teach for these assessments, producing clear cases of curriculum narrowing (Koretz 2008). These schools often align classroom practices with content and evaluation methods similar to those used in these tests, replace some subjects with more time devoted to assessed subjects (mainly Language and Mathematics), and use elective courses to prepare for the university admission test. Students are motivated to perform satisfactorily in these tests, leading to the perception that 'our high school does well'. According to students and teachers, there is significant pressure to achieve specific target scores in standardised tests.

> M3: I think the word we hear most in the second half is SIMCE.
>
> VARIOUS: Yes.
>
> M1: Yes, all year round.
>
> M1: SIMCE, grades.
>
> H2: SIMCE and grades are the two words.
>
> M1: SIMCE, grades, 'Kids, the SIMCE is coming in November, such and such subject, you have to get such and such a score to keep or raise it', 'kids, raise the grades, 'kids, the SIMCE is coming' (Students, C).

Ability grouping, selectivity, and other ways of addressing student heterogeneity

These schools developed strong selectivity mechanisms upon admission or during the schooling process, which have favoured those students with better performance, behaviour, and willingness to learn. They employ mechanisms to select or impose high demands on students throughout their educational journey, resulting in a gradual reduction of both students and courses (e.g. a high school offers 9th grade vacancies for only 30% of its 8th grade students, assigned according to previous

performance). A teacher from one of these high schools explains how they guide the lowest-performing students to transfer to schools with lower academic demands or vocational high schools.

> As results are demanded in this school, these kids are a bit of a thorn in our side. So, for us, in the 10th grade, the head teacher is asked to do a lot of work so that these children don't stay here, that they go to a vocational school or similar (Teacher, L)

At the same time, these high schools apply various forms of rigid ability grouping, for example, ordering all courses based on reading ability and grades. Symbolically, the selectivity during the schooling process and the ability grouping enables these schools to sustain academic models that instil their students a notion of merit. Thus, those who successfully reach secondary education interpret this achievement through symbolic barriers that distinguish them from their (former) classmates who have fallen by the wayside, to whom they attribute lower motivation, lack of effort in studying, laziness, lower expectations, or even urban marginal culture. These symbolic borders are also drawn in relation to other secondary schools in their surroundings, which they generally consider inferior, dangerous, or less academically demanding.

Hierarchical leadership and low teacher autonomy

The school improvement has been promoted by the school authorities, who impulse these processes from above, so a scarce distribution of leadership is observed (Leithwood, Harris, and Strauss 2010). Although teachers are committed to these educational projects focused on academic achievement, they have little influence on the design and change of them. In one of these high schools, for example, part of the pedagogical management has been delegated to an external institution, who carry out classroom observations, provide feedback to teachers, deliver daily class plans and apply learning assessments to students. One of the teachers at this high school points out the following regarding this form of work.

> You are told, 'Look, ten hours here, five hours there, two hours here', that's all, and you have to stick to those times and try to get the students to learn in that period; it's a very rigorous planning, and you're under a lot of pressure to be able to fulfil the project they want to carry out. I think that sometimes it's a bit too structured and very rigid in that sense, leaving teachers with little freedom to make their own decisions about what to do. (Teacher, L)

Additionally, since these are complete schools offering K-12 education, many ways in which these secondary schools' function and key decisions come from the primary education level. The secondary level operates as an extension of this cycle, not as a separate organisation. For example, teachers work individually with the academic head, who has a strong control of the curricular and pedagogical processes, and there are no academic departments or other collective instances for the development of teaching professionalism typical of secondary schools (Leithwood 2016).

Discipline emphasis and absence of spaces for youth participation and expressions

Discipline is a key aspect of these high schools. This translates into strict standards of behaviour regulation, personal presentation, and associated sanctions, which are applied

consistently and added to the academic reasons to determine -in the end- student expulsions.

> We're pretty strict when it comes to the community handbook, in terms of enforcing the school code of conduct, and contacting the parents when necessary. We try to ensure that the school rules are strictly observed, with no exceptions. (Inspector, H)

They also urge students who are unwilling or have difficulties adapting to such regulations to change schools. These schools perceive themselves as highly protected spaces against threats from a dangerous environment, therefore, the educational purposes of the discipline are overshadowed by an orientation towards control.

Besides, there is a notorious absence of expression of youth cultures and spaces for democratic participation in these schools, including the non-existence of student council or their strong control by the school principals.

> . . .the Student Council doesn't get as much participation as it should have, and that sort of limits the students' voice. At the end of the day, students don´t have a say in what we think is right and what we think is wrong in the school. (Student, L)

In terms of the curriculum, there is limited inclusion of topics related to youth issues, and students have very few opportunities to choose from options that align with their interests. Nevertheless, the limited recognition of youth interests does not lead to active opposition from students to the school culture, since they have been early socialised in these dynamics and greatly value their schools, considering the precarious available opportunities in their environments. Broadly, teachers' vision of their students generally lacks recognition of them as young people going through a distinct stage of development compared to children in primary education, with different needs and concerns. This approach is reinforced by the fact that these are unique K-12 institutions.

Vocational high schools in disadvantaged populations

The last profile that we identified is made up of four vocational high schools. Two of them depend on a business company, are located in rural areas and have a boarding school where most of their students live. The other two are urban public high schools in cities close to the desert, in mining areas. These four schools educate students mainly from low socioeconomic sectors. The key to its improvement processes has been to adapt its educational offer to labour market demands, improving the equipment of its careers and expanding the options for linking with companies and technical higher education institutions.

Quality vocational education relevant to the labour market

These schools seek to offer a technical-professional curriculum that effectively enables students to enter the labour market. To achieve this, they implement strong management practices to access facilities and maintain up-to-date technical equipment. They provide continuous training for teachers specialising in their respective fields, reinforcing their pedagogical competencies and technical knowledge. Additionally, they constantly review the relevance of their career offerings, analysing the local labour market and having systematic links with the business community. This allows high schools to adapt their

curriculum to respond in a timely manner to the demands and changes in the economic sector.

> We have quite a lot partnerships going on. We have an agreement with the Higher-level Technical Institute of the University of Tarapacá, that validates certain courses for our students and with a Professional Institute as well. When it comes to companies, we have a Business Advisory Council, which are the companies where our students carry out professional internships. We have some sessions with them where they give us feedback on how our students are doing. (Director, A)

Educational goals that go beyond technical training

These high schools also develop other areas of the curriculum to broaden the opportunities for their graduates. In this sense, they no longer conceive secondary vocational education as a final stage, but as a first step in the professional trajectory of students, who can continue through post- secondary studies or even start economic ventures.

> We really get them thinking about entrepreneurship. If we manage to cultivate the entrepreneurial spirit in our students, they will leave school fired up and ready to take on the world. We've got entrepreneurs here [in the school] who've done really well. (Director, D)

The promotion of higher education by these schools aims at the social mobility of its students, mostly from socially disadvantaged backgrounds. To do this, they work hard on raising students' and families' expectations, and provide viable additional opportunities for students, like agreements to validate courses with post- secondary education institutions, or preparatory programmes with universities that facilitate access to higher education for its graduates.

Learning labour skills of different levels

Another common feature of these schools is that they teach their students personal skills that are valued in the labour market. On the one hand, acquiring formative dispositions related to the discipline of students in behaviours typical of the world of work, such as punctuality, efficiency, responsibility, and respect for safety and hygiene regulations. On the other hand, developing more complex labour competencies, such as the ability to communicate and negotiate with others, work planning, cognitive flexibility, and creativity. These objectives have been addressed in the curriculum, but also making significant efforts to regulate coexistence within schools. Students interpret these school rules as a means of protection, security, and familiarisation with workplace regulations.

> This secondary school gave me lots of tools, both academically and in terms of values. I'll never forget the things I went through here, what I learned here, and what I'm currently doing. The sense of responsibility, of being disciplined, of always being humble. These are things that are not found in other schools. (Former Student, B)

Powerful leadership based on strong teamwork

Studied vocational schools have large, very cohesive, and articulated management teams, with clear division of functions, and strong leadership, which are recognised by all actors as a key factor for the school improvement processes (Day et al. 2011). This professional culture based on teamwork and commitment has also been transferred to teachers, opening greater spaces for leadership and participation, such as departments and

coordination of specialities, as well as greater teachers' responsibilities and autonomy. School principals hold a high appreciation and trust in teachers, recognising their dedication and efforts, as well as a concern for their professional and personal needs, all of which generate teaching teams with a high sense of self-efficacy and markedly identified with the school educational project.

> He's committed to the project, has a clear vision and is competitive. He likes to win and is always there, with a very clear goal in mind. He wants to go further, and that motivates us. He gives his all, and we all align ourselves with that commitment. (Teacher, D)

Youth problems and psychosocial support

In general, these high schools focus more on education in life skills and prevention and intervention in psychosocial issues, rather than promoting the development of youth cultures or creating spaces for student participation. That is, they seek to make up for a deficit. However, rural and urban high schools address different challenges.

In rural schools the psychosocial problems have to do with a context of low socio-cultural capital and weak family and community support networks, which produces social isolation. In response, rural high schools stand out for the intense preventive psychosocial work and for their 'family' atmosphere, providing a welcoming space for students who need to leave their homes to study. Because a significant portion of their students live on campus, the discipline works like the norms and routines of daily life, and students adhere to them because they largely feel at the school as their home. They primarily address youth problems through emotional support, adopting a somewhat paternalistic approach to students' development and care.

> Here, the children feel loved and cared for, and they know that if they mess up, someone's there to help. That's not always the case in other places, where if a kid misses school for a week or two, it doesn't matter. But here, it does. (Teacher, A)

High schools in the mining cities have difficulties related to urban marginality, including segregation, violence, and drug and alcohol use in their communities

> The president of the local council came by and asked us to tell the council what we'd done to improve the school's image. He was talking about years ago (. . .) he told me that back then, girls used to fight outside the buildings, like hand-to-hand, and that there were gangs and all that, and you don't see that now. (Inspector, A)

Thus, mining high schools tend to be more reactive. Youth problems are addressed from a control approach and the opening of restricted spaces for the manifestation of students' interests (such as school radio and thematic talks). Rather, the idea of the educational space as an opportunity for social mobility predominates, through a more competitive seal in the labour market.

Discussion

Starting from the question about the differentiated approaches to school improvement in secondary education, we elaborated four institutional profiles of high schools. These profiles have been described using six key dimensions, which -although not exhaustive-

allow us to understand their specificity and analyse them comparatively. The following table presents a synthetic view of this analysis.

Table 1 shows the complex and non-mechanical relationships between the dimensions. For example, in our analytical framework, the context is represented by the dimensions of relationship with the community and market context, and this seems to be related to the degree of school selectivity. High schools of small communities practically do not face competition, which makes them socially and academically inclusive, since they have the responsibility of educating all school population of the territory; this facilitates an open and fluid relationship with their communities. Vocational schools, in turn, are located in environments of varied competition: while rural schools have low competitive pressure, schools in mining cities face high competition, although in both cases – given their vocational orientation – they are not selective in school admission; nevertheless, either to distance themselves from urban marginality or from the perceived rural cultural lag, these high schools are closed to their community environment. In contrast, the most selective high schools face high levels of competition for enrolment in urban environments. We observed two contrasting approaches to deal with it: distinguishing oneself from the environment by generating selective bubbles or integrating into it. The option for one or the other depends on school history and identity. On the one hand, high schools in metropolitan marginalised neighbourhoods entered the educational market with a strategic vision, identifying the concerns of families and students: located in areas with high social conflict, they offer an isolated and safe space from that environment perceived as threatening, for which they are 'behaviourally' selective. On the other hand, the traditional academically oriented public high schools that have been successful in maintaining a prestigious position are historically established as 'emblematic' in their cities and have been able to renew themselves without losing their seal of selectivity and academic excellence; as symbolic and prestigious public institutions, these high schools cultivate close and productive relationships with their communities, thereby benefiting from the historically accumulated social capital.

Thus, this multiple case study offers greater distinctions than previous school improvement studies. It provides a clear understanding of how high schools respond to contextual influences and the underlying rationale behind decisions, such as the level of inclusivity within the school, considering the diversification and stratification of the local school market. These decisions ultimately establish the conditions under which high schools conduct their pedagogical work and the managerial challenges they encounter.

Table 1. Basic characterisation of high school profiles facing school improvement.

Dimensions/School Profiles	Traditional Public	Small communities	Popular Metropolitan	Vocational Schools
Curriculum	Comprehensive	Comprehensive	Restricted	Restricted
Selectivity	Selective	Inclusive	Selective	Inclusive
Leadership	Distributed	Distributed	Hierarchical	Distributed
Participation/Youth Cultures	High	Medium	Low	Low
Community relationship	Open	Open	Closed	Closed
Market context	High Competition	Low competition	High Competition	High/Low Competition

Source: Authors' elaboration. See text for details.

In fact, as can be observed in Table 1, high schools define different curriculum approaches, which vary by their greater or lesser comprehensiveness, and entail different types of leadership. The studied high schools have implemented decisions on the emphasis of the curriculum that can be interpreted as curricular ideologies (Schiro 2007). While vocational schools are clearly marked by an ideology of social efficiency, highly focused on preparing competent workers, academically oriented public schools have a strong humanistic-scientific tradition, which values the education of active citizens; also, while high schools in small communities aim for a broad and diversified curriculum that allows them to accommodate the diversity of their student body, metropolitan-popular schools apply a restricted vision, strongly marked by behavioural discipline. We interpret the adoption of these curricular ideologies as unique combinations of educational traditions, which involve a perspective on the relationship between education and society, contextualised to the specific needs and circumstances of different school populations. Furthermore, the selected curricular ideologies of these high schools serve as identity markers, distinguishing them in the educational market and enabling the adoption of diverse strategies to attract students based on defined target populations, including socioeconomic status, students' abilities, and families' expectations.

Interestingly, in our typology, comprehensive curricula (present in high schools in small communities and traditional public schools) are promoted by management teams that distribute leadership and facilitate the professional practice of teachers, providing spaces for the development of teacher leadership, mainly in collective instances of work and coordination (Day et al. 2011; Robinson, Lloyd, and Rowe 2008). This reinforces the specialisation and professionalisation of teachers. In vocational schools, teaching specialisation is even greater, due to the need to combine general education with training in technical specialities, requiring a high level of role differentiation which also strengthens the autonomy of teachers. In contrast, the metropolitan-popular high schools show hierarchical managerial leadership, with few spaces for teacher professional development, since the curriculum is restricted to meeting performance goals measured by standardised tests.

Finally, all studied high schools share a low integration of youth cultures in school daily life, which shows a structural feature of Chilean education. However, they differ in the level of student participation, which is linked to their curricular options and their relationship with the local community. Schools showing higher levels of student participation are the traditional public high schools, consistent with their preparation of students for broad participation and leadership in society. In the schools of small communities, the dialogue with the students is also close, but paternalistic relations typical of the peasant tradition still persist. Vocational schools, meanwhile, concentrate their efforts on the double task of educating students in the general areas of the curriculum and those specific to their technical specialities, leaving little room for additional formative challenges. Likewise, in the metropolitan-popular schools, the mentioned curricular narrowing does not allow for comprehensive education that includes social dimensions. Thus, although for different reasons, in both latter types of high schools the control and discipline of students is perceived as a priority, restricting student participation and the education of critical citizens (Schiro 2007).

In summary, the institutional profiles we have developed facilitate a comprehensive understanding of secondary schools. They encompass issues related to school

improvement, institutional analysis of educational policies, and broader considerations of the education-society relationship.

We believe that these institutional profiles have an additional potential, which lies in their ability to address two fundamental imperatives in the field of secondary school improvement. Firstly, they allow us to recognise and study secondary schools not as a single, uniform reality, but as institutionally diverse entities. There is not one type of secondary school, but rather many types, and these variations are shaped by both their historical trajectories and the contexts in which they operate. The analysis of school improvement processes often presumes a common trajectory, conceived as stages along a continuum of 'educational quality.' The advent of test-based accountability policies has bolstered this perception of quality and improvement as linear and unidimensional. However, our analytical framework, presented in Table 1, clearly shows that high schools pursue distinct educational projects with diverse purposes, objectives, and educational ideologies that defy reduction to a single hierarchy.

Secondly, the institutional profiles help to understand that the improvement practices of secondary schools are pressed by the need to respond to external, growing and changing demands, coming from the labour market and higher education institutions. High school improvement processes are not seen in isolation; rather, they are understood as adaptive changes in response to the broader educational and social dynamics. These institutional profiles can be interpreted as the organisational responses to the context and policies, effectively translated into institutional educational projects (Gu and Johansson 2013; Lupton and Thrupp 2007).

Conclusions

This paper is based on a qualitative multiple case study of 12 Chilean secondary schools that experienced sustained processes of improvement in performance for more than a decade. Our research question aimed to analyse the diversity in school improvement processes and identify the factors and conditions contributing to this heterogeneity.

As a result of the cross-case analysis, we identified four institutional high school profiles: traditional academically oriented public high schools; comprehensive high schools from small communities; restrictive metropolitan popular high schools; and vocational high schools. We understand them as typical organisational configurations that produce significantly different responses to school improvement challenges. Certainly, we have emphasised that these profiles are not closed and monochromatic categories.

Understanding school improvement processes in secondary education through these institutional profiles enhances this type of study by highlighting the organisational complexity of each institution and the challenges they encounter. Our analysis concluded that key educational decisions such as curricular approaches and the various emphases placed on learning by high schools, the type of organisational leadership or degree of openness to youth participation and voice, are best understood when viewed in relation to more structural decisions made by schools regarding their position in the local educational market, their degree of selectivity, and the type of relationships established with their environment. Although the importance of these external relationships may be highlighted in the Chilean case due to its institutional market design, we maintain that

this general framework of analysis is also valid for other educational systems, although the particular emphases may change.

The identified high school profiles also suggest the need for differentiated improvement policies and strategies that go beyond the traditional segmentation between general and vocational education, or approaches based solely on academic performance measured by standardised tests (Mehta and Fine 2019). Thus, for example, when we analyse the very different contexts of secondary schools, their curricular approaches, and the degree of socio-educational inclusion, it becomes evident which factors facilitate or limit their capacity to produce a holistic improvement and offer a comprehensive educational experience to their students. This is particularly sensitive when considering that several trends in educational policies, which are also present in Chile, (such as the elimination of student selection, the increase relevance of standardised testing, and the expansion of post-secondary education) often seek objectives that were contradictory or challenging to reconcile with the institutional projects of many high schools. Moreover, given the common lack of policy and institutional support, high schools responded in an idiosyncratic way, depending on their contexts and their own professional resources.

We began this paper by noting the profound transformations that secondary education has undergone in recent decades. These have resulted in massification and institutional segmentation as structural responses to contradictory social demands. Our findings reveal how these transformations are experienced at the concrete level of high school processes and how they ultimately manifest in different types of educational projects and formative experiences.

Finally, our study has some limitations that should be consider. First, the educational performance index is inherently limited in its empirical scope, with a certain bias towards academic achievement, due to the lack of comparable longitudinal information on other relevant dimensions of the educational experience. To address this limitation, we thoroughly considered these dimensions when selecting our sample and in the in-depth qualitative study of each school. Second, our institutional profiles were developed to understand organisational responses to school improvement; therefore, a question for future research is: how applicable are these profiles to secondary schools that have not improved? Third, although our case studies considered observations and interviews on pedagogical practices, we believe that this dimension should be expanded in future research, to -eventually- include it as another key criteria of the identified institutional profiles.

Note

1. This privatisation is a result of market dynamics that have shaped education in Chile. Since 1980, families have had the freedom to choose their children's schools, and all secondary schools, whether public or subsidised private, must compete openly for their preferences. Public financing is allocated based on a 'voucher' system tied to the number of students attending each school.

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References

Barlett, L., and F. Vavrus. 2017. *Rethinking Case Study Research. A Comparative Approach*. New York: Routledge.

Bellei, C., M. Contreras, J. P. Valenzuela, and X. Vanni. 2021. *El liceo en tiempos turbulentos: ¿Cómo ha cambiado la educación media en Chile?* Santiago, Chile: Lom Ediciones.

Bellei, C., L. Morawietz, J. P. Valenzuela, and X. Vanni, Eds. 2015. *Nadie dijo que era fácil. Escuelas efectivas en sectores de pobreza, diez años después*. Santiago, Chile: LOM.

Bonal, X. 2005. *Apropiaciones escolares. Usos y sentidos de la educación obligatoria en la adolescencia*. Barcelona: Editorial Octaedro.
Bourdieu, P. 1999. *La miseria del mundo*. Madrid, Spain: Fondo de Cultura Económica.
Bryman, A. 2012. *Social Research Methods*. New York: Oxford University Press.
Chmielewski, A. K. 2014. "An International Comparison of Achievement Inequality in Within-And between-School Tracking Systems." *American Journal of Education* 120 (3): 293–324. https://doi.org/10.1086/675529.
Creswell, J. W. 2007. *Qualitative Inquiry & Research Design. Choosing among Five Approaches*. Thousand Oaks, CA: Sage Publications.
Day, C., P. Sammons, K. Leithwood, D. Hopkins, Q. Gu, E. Brown, and E. Ahtaridou. 2011. *Successful School Leadership: Linking with Learning and Achievement*. Berkshire, England: McGraw-Hill Education (UK).
Dubet, F. 1991. *Les lycéens*. Paris: Le Seuil.
Feldman, A. F., and J. L. Matjasko. 2005. "The Role of School-Based Extracurricular Activities in Adolescent Development: A Comprehensive Review and Future Directions." *Review of Educational Research* 75 (2): 159–210. https://doi.org/10.3102/00346543075002159.
George, A. L., and A. Bennett. 2005. *Case Studies and Theory Development in the Social Sciences*. Cambridge, Massachussett: The MIT Press.
Gu, Q., and O. Johansson. 2013. "Sustaining School Performance: School Contexts Matter." *International Journal of Leadership in Education* 16 (3): 301–326. https://doi.org/10.1080/13603124.2012.732242.
Hargreaves, A., and I. Goodson. 2006. "Educational Change Over Time? The Sustainability and Nonsustainability of Three Decades of Secondary School Change and Continuity." *Educational Administration Quarterly* 42 (1): 3–41. https://doi.org/10.1177/0013161X05277975.
Harris, A. 2001. "Department Improvement and School Improvement: A Missing Link?" *British Educational Research Journal* 27 (4): 477–486. https://doi.org/10.1080/01411920120071470.
Harris, A., C. Chapman, D. Muijs, J. Russ, and L. Stoll. 2006. "Improving Schools in Challenging Contexts: Exploring the Possible." *School Effectiveness and School Improvement* 17 (4): 409–424. https://doi.org/10.1080/09243450600743483.
Highfield, C. 2010. "Disparity in Student Achievement within and Across Secondary Schools: An Analysis of Department Results in English, Maths and Science in New Zealand." *School Leadership & Management* 30 (2): 171–190. https://doi.org/10.1080/13632431003685860.
Kerckhoff, A. C. 2000. "Transition from School to Work in Comparative Perspective." In *Handbook of the Sociology of Education*, edited M. T. Hallinan, 453–474. Boston, MA: Springer.
Ko, J., P. Hallinger, and A. Walker. 2015. "Exploring Whole School versus Subject Department Improvement in Hong Kong Secondary Schools." *School Effectiveness and School Improvement* 26 (2): 215–239. https://doi.org/10.1080/09243453.2014.882848.
Koretz, D. M. 2008. *Measuring Up*. Cambridge, MA: Harvard University Press.
Lee, M., and L. Seashore. 2019. "Mapping a Strong School Culture and Linking it to Sustainable School Improvement." *Teaching & Teacher Education* 81 (1): 84–96. https://doi.org/10.1016/j.tate.2019.02.001.
Lee, V. E., and J. B. Smith. 1999. "Social Support and Achievement for Young Adolescents in Chicago: The Role of School Academic Press." *American Educational Research Journal* 36 (4): 907–945. https://doi.org/10.3102/00028312036004907.
Leithwood, K. 2016. "Department-Head Leadership for School Improvement." *Leadership and Policy in Schools* 15 (2): 117–140. https://doi.org/10.1080/15700763.2015.1044538.
Leithwood, K., A. Harris, and T. Strauss. 2010. *Leading School Turnaround: How Successful Leaders Transform Low-Performing Schools*. San Francisco, CA: John Wiley & Sons.
Levinson, B. 2012. "Reduciendo brechas entre cultura juvenil y cultura docente escolar: El desafío institucional para crear una secundaria con sentido." In *La escolarización de los adolescentes*, edited by E. E. Tenti, 79–112. Buenos Aires and Paris: IIPE-UNESCO.
Lupton, R., and M. Thrupp. 2007. "Taking Local Contexts More Seriously: The Challenge for Education Research, Policy and Practice." *International studies in educational inequality, theory and policy*, 779–797. Dordrecht: Springer Netherlands.

MacBeath, J. 2007. "Improving School Effectiveness: Retrospective and Prospective." In *International Handbook of School Effectiveness and Improvement, Part One*, edited by T. Townsend, 57–74. Dordrecht, The Netherlands: Springer.

MacBeath, J., J. Gray, J. Cullen, D. Frost, S. Steward, and S. Swaffield. 2007. *Schools on the Edge: Responding to Challenging Circumstances*. London: Paul Chapman.

Mehta, J., and S. Fine. 2019. *In Search of Deeper Learning. The Quest to Remake the American High School*. Cambridge, MA: Harvard University Press.

Merriam, S. 2009. *Qualitative Research. A Guide to Design and Implementation*. San Francisco, CA: Jossey-Bass.

Mineduc. 2010. *Informe Nacional Resultados PISA 2009 Chile*. Santiago: Unidad de Curriculum y Evaluación.

Ministerio de Educación. 2019. *Estadísticas de la Educación 2018*. Santiago, Chile: Centro de Estudios.

Ministerio de Educación & Biblioteca del Congreso Nacional de Chile. 2015. *Ley 20.845 del 8 de junio de 2015: Ley de inclusión escolar*.

Muijs, D. 2007. "Improving Failing Schools: Towards a Research Based Model. Stating the Problem–What are Failing Schools?" *20th Annual World International Congress for Effectiveness and Improvement*.

Nicolaidou, M., and M. Ainscow. 2005. "Understanding Failing Schools: Perspectives from the Inside." *School Effectiveness and School Improvement* 16 (3): 229–248. https://doi.org/10.1080/09243450500113647.

Peck, S. C., R. W. Roeser, N. Zarrett, and J. S. Eccles. 2009. "Exploring the Roles of Extracurricular Activity Quantity and Quality in the Educational Resilience of Vulnerable Adolescents: Variable- and Pattern-Centered Approaches." *The Journal of Social Issues* 64 (1): 135–156. https://doi.org/10.1111/j.1540-4560.2008.00552.x.

Powell, G., E. Farrar, and D. K. Cohen. 1985. *The Shopping Mall High School: Winners and Losers in the Educational Marketplace*. Boston: Houghton Mifflin.

Preston, C., E. Goldring, J. E. Guthrie, R. Ramsey, and J. Huff. 2017. "Conceptualizing Essential Components of Effective High Schools." *Leadership and Policy in Schools* 16 (4): 525–562. https://doi.org/10.1080/15700763.2016.1205198.

Reynolds, D., and P. Clarke. 2014. "Educational Effectiveness Research – What if … ?" *International Congress for School Effectiveness and Improvement*, Yogyakarta, Indonesia.

Robinson, V. M., C. A. Lloyd, and K. J. Rowe. 2008. "The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types." *Educational Administration Quarterly* 44 (5): 635–674. https://doi.org/10.1177/0013161X08321509.

Rutledge, S. A., and M. Cannata. 2016. "Identifying and Understanding Effective High School Practices." *Phi Delta Kappan* 97 (6): 60–64.

Rutledge, S. A., L. Cohen-Vogel, L. T. Osborne-Lampkin, and R. L. Roberts. 2015. "Understanding Effective High Schools: Evidence for Personalization for Academic and Social Emotional Learning." *American Educational Research Journal* 52 (6): 1060–1092. https://doi.org/10.3102/0002831215602328.

Schiro, M. 2007. *Curriculum Theory: Conflicting Visions and Enduring Concerns*. Thousand Oaks: Sage Publications.

Seashore Louis, K., and M. Lee. 2016. "Teachers' Capacity for Organizational Learning: The Effects of School Culture and Context." *School Effectiveness and School Improvement* 27 (4): 534–556. https://doi.org/10.1080/09243453.2016.1189437.

Stake, R. E. 2006. *Multiple Case Study Analysis*. New York: The Guildford Press.

Stringfield, S., D. Reynolds, and E. Schaffer. 2014. "The Creation and 13-Year Sustaining of Dramatically Improved Secondary Schooling." *Paper presented at the annual meeting of the American Educational Research Association*, Philadelphia, Pennsylvania, USA.

Thrupp, M., R. Lupton, and C. Brown. 2007. "Pursuing the Contextualisation Agenda: Recent Progress and Future Prospects." In *International Handbook of School Effectiveness and Improvement: Review, Reflection and Reframing*, edited by T. Townsend, 111–126. Dordrecht: Springer.

Tichnor-Wagner, A., C. Harrison, and L. Cohen-Vogel. 2016. "Cultures of Learning in Effective High Schools." *Educational Administration Quarterly* 52 (4): 602–642. https://doi.org/10.1177/0013161X16644957.

Valenzuela, J. P., C. Bellei, and C. Allende. 2016. "Measuring Systematic Long-Term Trajectories of School Effectiveness Improvement." *School Effectiveness and School Improvement* 27 (4): 473–491. https://doi.org/10.1080/09243453.2016.1150861.

Van Maele, D., P. B. Forsyth, and M. Van Houtte. 2014. *Trust and School Life*. Rotterdam, The Netherlands: Springer.

Walker, C. O., and B. A. Greene. 2009. "The Relations Between Student Motivational Beliefs and Cognitive Engagement in High School." *Journal of Educational Research* 102 (6): 463–472. https://doi.org/10.3200/JOER.102.6.463-472.

West, M., M. Ainscow, and J. Stanford. 2005. "Sustaining Improvement in Schools in Challenging Circumstances: A Study of Successful Practice." *School Leadership & Management* 25 (1): 77–93. https://doi.org/10.1080/1363243052000317055.

Appendix

Sample Descriptive Characteristics of Schools

School	Administrative dependency	Area	Location	Socioeconomic level	School Type	Enrolment
A	Public	North	Urban	Low	Vocational	775
B	Private subsidised	South	Rural	Low	Vocational	355
C	Private subsidised	Metropolitan	Urban	Low	Vocational	157
D	Private subsidised	South	Rural	Low	Vocational	970
E	Public	South	Urban	Middle – Low	Scientific – Humanistic	529
F	Public	South	Urban	Middle – Low	Scientific – Humanistic	1171
G	Public	South	Urban	Middle – Low	Polyvalent	1033
H	Public	Metropolitan	Urban	Middle – Low	Scientific – Humanistic	634
I	Public	South	Urban	Middle – Low	Scientific – Humanistic	235
J	Public	North	Urban	Middle	Vocational	1188
K	Public	South	Urban	Middle	Scientific – Humanistic	985
L	Public	Metropolitan	Urban	Middle	Scientific – Humanistic	194