

# PERCEIVED SUCCESS FACTORS IN AN OUTSTANDING SCHOOL SERVING SOCIOECONOMICALLY VULNERABLE STUDENTS: CASE STUDY OF A CHILEAN PRIMARY SCHOOL

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# **SUMMARY**

This qualitative research explores, using a study-case method, the perceived success factors in an outstanding Chilean primary school which serves socioeconomically vulnerable students. A purposive sample based on convenience of 10 teachers and 3 school leaders participated in 13 semistructured interviews and 3 class observations. Through a thematic analysis, 13 themes regarding school success factors composed of 40 codes were identified. All themes were organized under the 3 structural categories based on the constitutive elements of the Instructional Core model (teachers, students and contents). The analysis revealed the importance of the interrelation among success factors to understand the impact of these elements in school effectiveness. Also, elements such as the ongoing and changing nature of the success factors, the strong influence of leadership and internal relationships and the use of professional judgement, discretion and situated knowledge by teachers, were identified as key aspects to understand the effectiveness of this school in the Chilean educational context. The research concludes by proposing some challenges to encourage school effectiveness in the Chilean public sector as a way to foster equity and social justice through education.

Keywords: effectiveness, educational effectiveness school effectiveness, classroom effectiveness, instructional core, teachers, vulnerable students, primary school success factors, case-study, thematic analysis.

# **RESUMEN**

Esta investigación cualitativa explora, usando como metodología un estudio de caso, los factores de éxito percibidos en una escuela pública chilena con resultados sobresalientes, que atiende estudiantes socioeconómicamente vulnerables. Una muestra intencional basada en conveniencia de 10 profesores y 3 miembros del equipo directivo de la escuela participaron en 13 entrevistas semi-estructuradas y 3 observaciones de clase. A través de un análisis temático, 13 temas asociados a los factores de éxito de la escuela, compuestos por 40 códigos, fueron identificados. Todos los temas fueron organizados bajo 3 categorías estructurales del estudio, basadas en los elementos constituyentes del modelo del Núcleo Pedagógico (profesores, estudiantes y contenido). El análisis reveló la importancia de la interrelación entre los factores de éxito como eje para entender el impacto de estos elementos en la efectividad de la escuela. Además, algunos elementos como la naturaleza permanentemente cambiante de los factores de éxito, la fuerte influencia del liderazgo y las relaciones internas del staff de la escuela, y el uso de discreción, juicio profesional and conocimiento situado de los profesores, fueron identificados como aspectos claves para entender la efectividad de esta escuela dentro del contexto educacional chileno. Esta investigación concluye promoviendo algunos desafíos en el fortalecimiento de la efectividad en las escuelas públicas chilenas, como un modo de potenciar la equidad y justicia social dentro del sistema educativo.

Palabras claves: efectividad, efectividad educativa, efectividad escolar, efectividad en la sala de clases, núcleo pedagógico, profesores, estudiantes vulnerables, escuela primaria, factores de éxito escolar, caso de estudio, análisis temático.

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# 1. INTRODUCTION

Understanding why some schools are more effective than others has been a longstanding topic of discussion among scholars, both in Chile (Valenzuela *et al.*, 2016; Bellei *et al.*, 2014; Palomer and Paredes, 2009) and elsewhere (Chapman *et al.*, 2016; Smith, 2011; Reynolds, 2002; MacBeath and Mortimore, 2001; Teddlie and Reynolds, 2000; Mortimore, 1998; Ainscow, 1991). Since 1970, researchers have analysed hundreds of schools in tens of countries, trying to understand the differential school characteristics that could explain variance in the school effect (James *et al.*, 2006; Sammons, 1999).

Although there is no consensus about what specifically constitutes an effective school (Sammons, 1999), the school effectiveness movement has been able to obtain evidence of the link between several specific school characteristics and educational effectiveness (Teddlie and Reynolds, 2000). Models like the Instructional Core highlight how these school characteristics can interact under interrelated, mutually dependent relationships, influencing the educational process at the core (City *et al.*, 2009). In this sense, evidence suggests that schools are able to add value to students' outcomes through schooling, despite their initial conditions (Rivkin *et al.*, 2005; MacBeath and Mortimore, 2001). All this research has countered the position of authors such as Coleman (1966, cited in Teddlie and Reynolds, 2000) and Jencks (1972), who argued that schooling makes no difference.

In the Chilean education system, school efficiency is highly correlated with the SES of the student body, due mostly to the high level of socioeconomic segregation, depending on school type (Valenzuela *et al.*, 2014). Private and subsidized schools tend to attract more skilled students from middle and higher social classes, concentrating most vulnerable pupils in the public sector (Troncoso *et al.*, 2016; Contreras *et al.*, 2010; McEwan *et al.*, 2008; Matear, 2007). According to the OECD (2017), vulnerable Chilean students tend to perform lower than their peers from higher SES quintiles. As a logical

consequence, evidence shows that public schools, overall, have lower performance than private schools (Muñoz and Queupil, 2016; Mizala *et al*. 2002). Nevertheless, there are public schools in Chile which are able to achieve outstanding results, being highlighted as successful cases by the government and Chilean scholars (Education Quality Agency Chile. 2017a; Bellei *et al*., 2014; Bellei *et al*., 2004). Therefore, there is a strong interest among Chilean public authorities in trying to understand how, despite all of these disadvantages, those public schools, which serve large percentages of vulnerable students, are able be effective (Education Quality Agency Chile, 2017a; 2017b). According to Bellei *et al*. (2004), understanding why these schools are effective can help to promote more suitable improvement strategies for public schools. This research explores in deep a case-study of one of these outstanding Chilean public schools, using thematic analysis. The initial research questions were:

- 1. What are the perceived success factors that, according to school staff, can explain the outstanding performance of this public school?
- 2. How are these perceived success factors related to the theoretical framework on school and classroom effectiveness and the Instructional Core model?
- 3. How can these perceived success factors explain the outstanding perform of this case-study?

As a theoretical framework, the Instructional Core model and the literature on school and classroom effectiveness were used. In this sense, the study aimed to identify the school's success factors through a deep-analysis of the perceptions of school staff, providing appropriate and sufficient detail and thick descriptions to facilitate the use of this information by other researchers, policy-makers or practitioners that work within similar contexts (Mitchell, 1983; Bassey, 1981). Given the scarcity of case studies on effective schools in Chile, this research aims to contribute new evidence on this topic.

# 2. LITERATURE REVIEW

In this section, a review of literature and research about school and classroom effectiveness is presented, connecting those theoretical frameworks with the Instructional Core model. Also, it is provided key information regarding the Chilean educational system and the specific study-case explored.

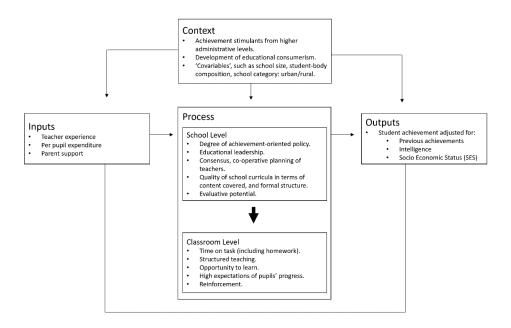
# 2.1. School effectiveness

### 2.1.1. Theoretical framework of school effectiveness

Although there is no consensus among scholars about what specifically constitutes an effective school (MacBeath and Mortimore, 2001), Mortimore (1998) suggested that an *effective school* can be defined as "a school in which students progress further than might be expected from a consideration of its intake" (pp.319). Elmore (1996; 1995) pointed out that some schools present outstanding internal practices, managing to be more effective than others. Authors such as Rivkin *et al.* (2005), Cohen *et al.* (2003), Reynolds *et al.*, (2002), Teddlie and Reynolds (2000) and Sammons (1999) concluded that schools are able to make a difference and influence the students' outcomes, regardless of their initial conditions, due mainly to key internal characteristics.

Chapman *et al.* (2016), Sammons (1999) and Mortimore (1998) analyzed the variation in the school effect among pupils, suggesting that school effectiveness is not only related to the processes that make a school better than others but also how it is able to *add value* to students through these processes. This conceptualization of school effectiveness, as a process of adding value, was analysed by Scheerens (1990, cited in Mortimore 1998), who created one of the first integrated theoretical models to explain school effectiveness (Figure 1). The model analyses the links between inputs and internal processes at school and classroom level, and how the interaction between those elements is able to make an impact on students' outputs.

Figure 1: Scheerens's theoretical model of school effectiveness

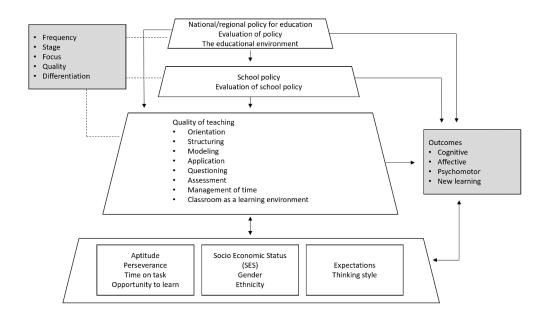


Source: Mortimore, 1998

Regarding the school management level, most of the literature on school effectiveness has acknowledged leadership as an important factor in an effective school (O'Brien et al., 2008). According to MacBeath (1998), leaders in effective schools are able to promote strong relationships and encourage a shared view of leadership. Manz and Sims's (cited in Davies et al., 2005, pp.95) suggested that effective school leaders are adept at "leading others to lead themselves". Hudson (2009) and Brighouse and Woods (2008) remarked that one of the key elements of leadership in effective schools is the capability of the leader to manage and anticipate changing scenarios.

Fullan (1992) added another broad feature to school effectiveness, pointing out that effective schools present a remarkable capacity to adapt effectively to change. Building on Fullan's perspective of the ongoing nature of the educational process, further explanatory models emerged from Scheerens's scheme, understanding school effectiveness as a process in constant adaptation. An example of later models is Creemers and Kyriakides's dynamic model (Chapman *et al.*, 2016), which is presented in Figure 2.

Figure 2: Creemers and Kyriakides's dynamic model



Source: Chapman et al., 2016

In Creemers and Kyriakides's model, teaching and learning are emphasized as central elements that explain school effectiveness, highlighting the role of teachers and students (Chapman *et al.*, 2016). Similarly, Elmore (1996) concluded that educational effectiveness is strongly influenced by the protagonists of instructional practice at the core.

Several authors have attempted to identify the characteristics of effective schools. According to Muijs and Reynolds (2001), Smith (2011), Hudson (2009), Teodorović (2009), James *et al.* (2006), Dean (2005), Kerry and Wilding (2004), MacBeath and Mortimore (2001), Teddlie and Reynolds (2000), Sammons (1999), Mortimore (1998), Silver (1994), Levin and Lockheed (1993), Ainscow (1991), Lockheed and Verspoor (1991), Smith (1990), Beare *et al.* (1989), and Rutter (1979), an effective school would present the following characteristics:

### At school level:

Effective and purposeful school leadership

- Clear, coherent and shared schools and instructional goals
- Collaborative ethos
- Confidence and trust in school staff
- Permanent professional development
- Clear and challenging staff roles
- Use of data in instructional practice
- Parental and community involvement
- Capacity to innovate and openness to change
- Positive school climate

### At classroom level:

- High expectations for students' outcomes
- Well-conducted lessons, with a learning orientation
- Collaborative and flexible class planning
- Positive view of the students' capacities to learn
- Effective time management
- Progressive evaluation and provision of feedback to students
- · Positive learning environment and classroom climate
- Promotion of students' autonomy, discipline and self-responsibility
- Well-structured curriculum, adapted to student characteristics

# 2.1.2. Research on school effectiveness

There has been extensive research over the last 30 years into factors related to school effectiveness (James *et al.*, 2006; Sammons, 1999). This research began in respond to Jencks (1972) and Coleman's (1966, Teddlie and Reynolds, 2000) suggestions that schools make no difference to students' achievements (Teddlie and Reynolds, 2000; Murphy, 1985). Although there is a considerable evidence of the impact of student's initial conditions on educational outcomes (Sammons, 1999), school effectiveness research has gradually demonstrated that schools are able to add value to students' learning (MacBeath and

Mortimore, 2001). Several studies suggest that the school effect can explain around 12-18 percent of variance in students' outcomes (James *et al.*, 2006).

For example, Sammons (1999), in her analysis of 23 studies of school effectiveness around the world, compared the findings from two large research projects in the UK: ILEA's Junior School Project and Rutter's Fifteen Thousand Hours research. Both studies suggested that some internal processes undertaken by schools and teachers were directly connected with students' progress. In a similar comparative analysis, Teddlie and Reynolds (2000) contrasted reviews of hundreds of studies on school effectiveness from different countries. The authors found significant evidence of a link between certain internal school practices and academic progress.

In another example, James *et al.* (2006) analysed the findings of Teddlie and Stringfield's study of 76 schools in Louisiana, and Hallinger and Murphy's research, which involved 8 schools in California. The author concluded that practices undertaken by school actors had a relevant impact on the school effect. These conclusions are similar to the findings of the International School Effectiveness Research Project, carried out in 9 countries. Among the findings, all the higher-rated dimensions of the study were directly related to processes carried out at school and classroom level (Reynolds *et al.*, 2002). Brookover *et al.* (1979, cited in Teddlie and Reynolds, 2000), in their statistical analysis of 68 elementary schools in Michigan, also remarked on the impact of similar school and classroom aspects.

Dobbie and Fryer (2013) correlated specific school policies with educational outcomes linked to school effectiveness in 39 charter schools in New York, concluding that effective schools are more likely to use data in their practice, use time effectively, present a more flexible and less complex strategy to class planning, and exhibit high expectations of student achievement. These elements explained approximately 45% of the variation in effectiveness among schools. Levin and Lockheed (1993) analysed two cases of effective schools in Brazil (CIEP schools) and Colombia (Escuela Nueva). The authors conclude that

these actions developed by schools and particularly teachers affect student attainment.

### 2.2. Effective classrooms

Before 1990, most of the literature on school effectiveness focussed on the factors that influence performance at the school level, not necessarily considering classroom-level factors. Gradually, scholars began to research elements of classroom dynamics to understand school effectiveness in a more holistic manner (Marzano, 2003).

To improve classroom effectiveness, it is necessary to migrate from a teacher's performance based on basic teaching concepts to the development of a theory of instruction grounded in evidence, with systematic application of technical processes (Jones, 2012). Watkins *et al.* (2007, pp.xii) noted that "the context of the classroom affects a great deal of what teachers and pupils do". Jones (2012) grouped all the key events of the classroom context into a basic cycle (Figure 3).

Additional motivational and emotional factors applied in all moves Preparing to teach: perception and PREPARATION attention factors for instruction PERCEPTION & ATENTION MOTIVATION & **EMOTIONS** Introducing concepts: the factors INTRODUCE CONCEPTS which need to be considered when Metacognition and thinking concepts are introduced processes to be emphasized in all moves Developing concepts: the role of context, elaboration, depth of **DEVELOP & EXPAND** CONCEPTS processing, etc. in expanding from the introduction **METACOGNITION &** THINKING PROCESSES TRANSFER & APPLY Application and transfer of concepts CONCEPTS

Figure 3: Basic cycle of classroom events that impact effectiveness

Source: adapted from Jones (2012)

The cycle includes all the pedagogical and contextual elements that can affect the role of teacher and student in relation to the content within a typical lesson. The theory of instruction and the outcomes of the cycle will be directly affected by the learning approach that teachers implement. In a similar perspective, Kington *et al.* (2014) also identified the key factors that contribute to effectiveness in classroom practice, shown in Figure 4.

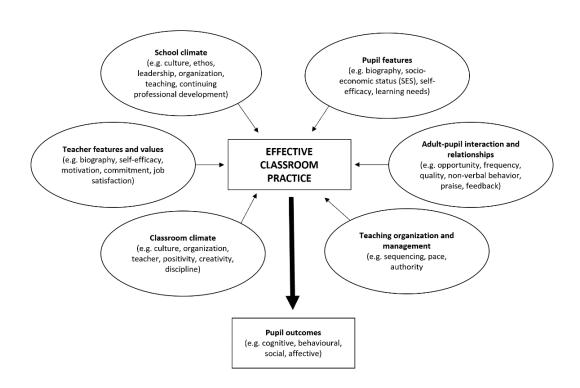


Figure 4: Model of factors contributing to effective classroom practice

Source: Kington et al., 2014

A more effective classroom would be linked to a strategy based on the cognitive model of teaching, where the thinking process is the key element and students assume a more active, self-motivated and autonomous approach (Jones, 2012; Jarvis, 2005; Volet and Järvelä, 2001; Vygotsky *et al.*, 1978; Piaget and Coltman, 1971). Following Jones's (2012) cycle, there are other factors that influence the classroom's effectiveness, which are presented below.

### 2.2.1. Motivation and emotions

According to Jones (2012), proper articulation between the student's motivation and a positive context is a key element of challenging learning experiences. According to Schunk *et al.* (2014) and Bandura (1986), teachers and students attribute their behaviours and emotions to causal determinants, which are based on the reciprocal interactions between personal, behavioural and environmental factors.

Different authors, such as Kyriacou, 2014, Mellanby and Theobald, 2014, Meece and Pintrich, 2014, Schunk *et al.*, 2014, Tileston, 2010, Stronge, 2007, Lawrence, 2006, Kerry and Wilding, 2004, Gilbert, 2002, Volet and Järvelä, 2001 highlight diverse emotional and motivational factors that are present within effective classrooms, such as the promotion of intrinsic motivation, use of praise, enthusiastic teachers, empowered students, a valuation of effort and resilience, a positive classroom climate, high expectations, a proper teacher-student relationship, discouragement of competition among students, among others.

# 2.2.2. Metacognition and thinking processes

De Bono (1982) remarked upon the importance of including basic thinking skills within classrooms. Over the past decades, major efforts have been made to include the development of thinking skills in schools (Lipman, 2003). Jones (2012) suggests that one of the most relevant goals of education in modern systems is the development of thinking processes, understanding that a higher level of thinking is not natural to the majority of pupils.

There are different authors, such as Halpern, 2014, Kyriacou, 2014, Mellanby and Theobald, 2014, Jones, 2012, Fisher, 2005, Bransford and Stein, 1993, Glaser and Resnick, 1989, who suggest relevant aspects related to the promotion of metacognition, such as the use of inquiry and problem-solving, the promotion of collaboration, self-regulated students, the use of mixed

ability groups, the encouragement of critical thinking and creativity, the use of instrumental enrichment and intentional learning, teacher as a facilitator, positive error handling, a climate of curiosity, promotion of activities where students are able to make choices and use their judgment, and others.

# 2.2.3. Lesson stages

An essential challenge to consider in class planning is the inclusion of students' individual differences, analysing how those variations could influence learning (Tomilson and Moon, 2013). Teachers are challenged to develop differentiated strategies in order to help every student to achieve full potential (Nordlund, 2003). An effective classroom should help to improve students' performance in their task interaction using differential approaches and adapting the curriculum to their characteristics (Jones, 2012). According to Gregory and Chapman, 2013, Tomilson and Moon, 2013, O' Meara, 2010, Hudson, 2009, DiGiulio, 2004, Nordlund, 2003; Tomlinson, 1999, the characteristics of a classroom that effectively addresses differentiated instruction may include teachers with flexibility to respond to students' differences, a positive view of diversity, and a promotion of equity.

Besides differentiation, there are relevant aspects that can influence the effectiveness of student engagement which need to be carefully analysed and incorporated within class planning (Jones, 2012). Within the class planning, other authors, such as Johnson, 2011, Beadle, 2010, Stronge, 2007, Anderson, 2004, also highlight elements of an effective class, such as maximization of time on task, the use of data in the instructional process, clear setting of curricular objectives and expected standards, strategic planning of the classroom setting and proper teacher self-preparation. Kyriacou (2009) also highlights the inclusion of different student characteristics that need to be analyzed during class preparation, such as motivation, social class, gender and special needs. Kyriacou (2014) also points out that teaching depends on the ability of teachers to adapt their planned schemes to the classroom context.

The instruction of new content to students is a key event within the learning process. This stage determines all subsequent steps and the final effectiveness of the lesson (Kyriacou, 2014). The classroom is the strategic place where the content is delivered to pupils, and most learning takes place there. It is in the classroom where "the intended (or planned) curriculum becomes the implemented (or actual) curriculum" (Westbury, cited in Anderson, 2004, pp.75).

Reviewing several authors, such as Kyriacou, 2014, Kington *et al.*, 2014, Jones, 2012, Muijs and Reynolds, 2011, Stronge, 2007, Anderson, 2004, some of the key aspects in the development of the lesson are the use of representative examples, a holistic and sequential approach to the new content, the use of questioning and modelling, teachers with a high command of the content, the use of students' previous knowledge and experiences, the establishment of clear rules, among others.

After the introduction, the content needs to be developed and assessed through the lesson. At this stage, a large range of pedagogical and management skills need to be applied by teachers (Kyriacou, 2014). According to Kington *et al.*, 2014, Muijs and Reynolds, 2011, Stronge, 2007, DiGiulio, 2004, Kerry and Wilding, 2004, McLeod et al., 2003, some key elements for effective lesson development are the use of different learning environments, proper time management, use of practical activities, use of technology, prioritization of quality over quantity in curricular coverage, permanent monitoring of students' progress, an effective assessment process and teachers assuming responsibility for their students' outcomes.

Kington *et al.* (2014) also suggest that effective classroom practice is directly connected to teachers as effective practitioners. There are several characteristics that can be observed in effective practitioners, which are presented in Figure 5.

Figure 5: Key features of an effective practitioner

- 1. Highly motivated and committed to their students.
- 2. Value professional development and look for opportunities to improve their subject knowledge and teaching practice.
- 3. Build strong relationships with their students and ensure they know them well, so that they can understand their needs.
- 4. Are firm but fair, positive, open and supportive.
- 5. Communicate clearly with students, particularly in terms of expectations and feedback.
- 6. Have high expectation of their students.
- 7. Give positive praise and feedback to students, carefully adapted to the individual's needs.
- 8. Are flexible with lesson plans and are able to adapt and enrich lessons in ways appropriate for their students.
- 9. Plan creative, enjoyable and stimulating lessons to engage students in learning, by considering a range of different learning styles.
- 10. Encourage students to take control of their own learning and ask questions to guide their own intellectual enquiry.

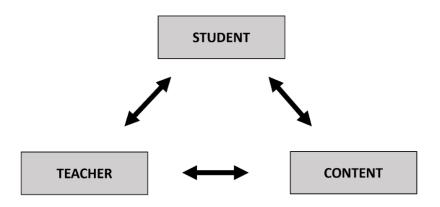
Source: Kington et al., 2014

### 2.3. The Instructional Core

The instructional core is composed of 3 elements (Figure 6), which are considered the centre of the pedagogic interaction within classrooms: teacher and students in the presence of content. It highlights the relevance of the relationship between these 3 elements over the qualities or characteristics of each factor by itself (City *et al.*, 2009).

The model is based on Cohen and Ball's (Cohen and Ball, 2001; 1999) work on the instructional effect of educational resources promoting effectiveness. They questioned the traditional perspective of educational resources, suggesting that "if practice-embedded knowledge and action affect learning, then teacher's and students' knowledge and actions also are resources" (Cohen *et al.*, 2003, pp.122). Hence, students and teachers were positioned as key resources of the instructional process.

Figure 6: The instructional core model



Source: City et al., 2009

Thus, since instruction consists of a set of interactions among teachers and students in the presence of content, there is necessarily an *interdependent relationship* between these actors (Cohen and Ball, 1999). Cohen *et al.* (2003, pp.132) pointed out that "Our theoretical frame makes interaction between teachers and students over content central to instruction and portrays teachers and students as interdependent actors: teachers' effectiveness depends partly on how well they can use students' ideas and initiatives, and students' effectiveness depends partly on how well they can use the tasks their teachers set, the comments their teachers make, etc". Therefore, teachers and students calibrate their actions and judgments according to those interrelated connections. The authors model a scheme of instructional interactions (Figure 7), with the instructional core at its centre.

At the centre of the instructional core is the task, which is not understood as the specific assignment stated by the curriculum to students but "what they are actually asked to do" (City et al., 2009, pp.23). The authors used Doyle's (1983) conceptualization of task, which is considered as the basic unit of the classroom. The key aspect of the inclusion of the task within the instructional core is that it encourages teachers to carefully observe the real work of

students (Loughland and Nguyen, 2016). The interdependent relationship between teachers and students, and the process of calibration of these interactions when these actors face curricular content and tasks, determine the effectiveness of the classroom (City *et al.*, 2009; Cohen *et al.*, 2003).

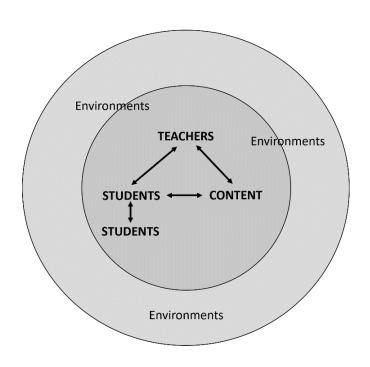
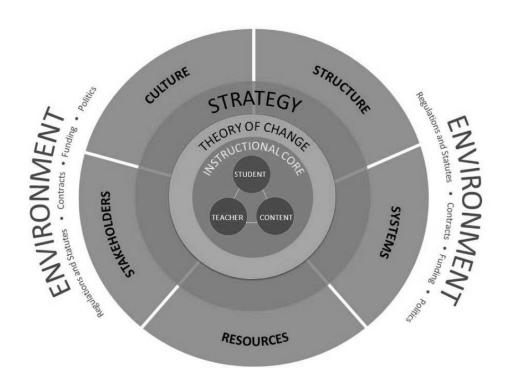


Figure 7: Instruction as interaction

Source: Cohen et al., 2003

Cohen and Ball (2001) remarked that the instructional interactions within the instructional core are not isolated from their environment. Environmental aspects are also incorporated within the core, influencing the interactions among internal actors. As a way to contribute a framework that enables an understanding of how the instructional core interacts with its environment under a multi-layered perspective, Childres *et al.* (2011) developed the *PELP Coherence Framework* (Figure 8). The model is based on Tushman and O'Reilly's (1997) Congruence Model and highlights the environmental elements that can support or affect an education strategy, identifying interdependences among the organisational aspects of school and environment.

Figure 8: PELP Coherence Framework



Source: Childres et al., 2011

# 2.4. The Chilean educational context

# 2.4.1. General structure of primary education

The Chilean educational system is divided into 4 levels: pre-school, primary, secondary, and higher education. Primary and secondary levels are mandatory, while pre-school and higher education are optional (MINEDUC, 2017a). The primary level consists of 8 grades, attended mainly by students between 6 and 14 years old. It is regulated by the Political Constitution of 1980 and the General Education Law of 2009. The instructional goals and the minimum learning levels expected are stipulated by the Chilean National Curriculum, which is mandatory for all schools (OECD, 2017). Primary schools are administrated by three types of educational providers:

- Public schools: non-profit institutions administrated by municipalities,
  which receive state subsidies.
- Private-subsidized schools: non-profit institutions administrated by private providers, which receive state subsidies.
- Independent private schools: non-profit or for-profit institutions administrated by private providers, which do not receive state subsidies.

In 2015, Chile had 8,421 primary schools: 4,613 public, 3,380 private-subsidized and 426 private (MINEDUC, 2017a). Chile currently has one of the highest levels of participation of private providers in education among OECD members (OECD, 2017).

# 2.4.2. Impact of segregation in the education system

Currently, the Chilean education system is one of the most socioeconomically segregated systems worldwide (Valenzuela et al., 2014). Among OECD countries, Chile presents one of the highest levels of correlation between socioeconomic status (SES) and PISA results (OECD, 2017). Segregation and inequality within the system have made Chile a worldwide case study of these issues (Santos and Elacqua, 2016; Bellei, 2013; Thieme and Treviño, 2013; OECD, 2012; Madero and Madero, 2012; McEwan et al., 2008). The causes behind these problems are explained mainly by the implementation of an extended voucher system, promotion of competition among schools, selective school admission processes, cream-skimming strategies used by the private sector, and the shared financing strategies carried out by private-subsidized schools. All these elements have relegated pupils from lower SES quintiles mainly to public schools and minimized the motivation among the public education sector to provide an equivalent educational service (MINEDUC, 2017a; Verger et al., 2016; Canales et al., 2016; Elacqua, 2012; Contreras et al., 2010; Matear, 2007; Parry, 1996).

In a statistical view, school effectiveness has been also affected by these policies. Mizala et al. (2002) evaluated the technical efficiency of Chilean schools by type, using the estimation of a stochastic production frontier and DEA. Independent private schools showed the highest level of efficiency, followed by subsidized schools. Public schools presented the poorest levels of efficiency. The authors explained that these differences in efficiency could be explained by selection bias, mainly because public schools are not able to select students. Similar research conducted in Chile by Muñoz and Queupil (2016) using SIMCE results arrived at the same conclusion, showing better effectiveness in the private sector over public schools. Also using DEA, the authors pointed out that student SES played an important role in school efficiency: "the most efficient schools in Chile were private schools in our analyses, where students usually come from families with high SES and higher levels of education. This is in serious contrast with public schools, where low efficiency could be explained by the vulnerable social and economic position of most of their students. Even though the Chilean education system is heterogeneous in terms of students' characteristics and student selection policies, most central regulations seem to weaken public schools, which, in turn, have created a serious segregation levels of poorer students" (Muñoz and Queupil, 2016, pp.322).

In another example, Troncoso *et al.* (2016) evaluated the progress of Chilean students in mathematics using a contextualized value-added model. They concluded that progress in mathematics is positively affected if students attend a subsidized school or non-low-SES school. Conversely, progress is negatively influenced if students attend a public school or low-SES school. The authors remarked that: "a word of caution is needed on these results. Differences between schools estimated value-added scores can partially be the result of a selection process in the school system" (Troncoso *et al.*, 2016, pp.309).

# 2.4.3. Research context

The school, which for the purposes of this study will be called *Mountainview*, is located in the second-largest city in the Antofagasta Region, Chile. According

to MINEDUC (2018a), Mountainview is an urban school, situated in a neighbourhood with predominantly low SES population. It has operated for 20 years, founded and officially recognized by the Ministry of Education in 1998. As a public school, Mountainview is administrated by a local education department. It is a not-for-profit institution, secular, without any type of selective admission processes and free of tuition. It is a primary school, serving students mainly between 6 and 14 years old, who are distributed into 8 grades and two cycles (first cycle: grade 1 to 4 and second cycle: grade 5 to 8). Currently, the school has 28 teachers, who serve 685 students, with an average of 42 students per class. The school currently presents a school vulnerability index of 68% (students classified as vulnerable), with an average between 2013-2018 of 56.3% (Junaeb, 2018). Details about Mountainview's outstanding indicators are available in *Appendix 1*.

# 2.5. An atypical case of an effective school

According to several authors (Chapman *et al.*, 2016; Smith, 2011; Reynolds, 2002; MacBeath and Mortimore, 2001; Teddlie and Reynolds, 2000; Mortimore, 1998; Ainscow, 1991), there is evidence that connects educational effectiveness with school and classroom characteristics. However, different models of educational effectiveness show that those characteristics do not work in isolation (Chapman *et al.*, 2016; Mortimore 1998). According to MacBeath and Mortimore (2011), there are several complexities to understand the internal functioning of an effective schools in a holistic manner. There are several models which help to understand these internal complexities within school and classroom effectiveness, as for example, the Instructional Core (City *et al.*, 2009). This model highlights the importance of interrelationships between actors and practices involved in the instructional process at the core (City *et al.*, 2009; Cohen *et al.*, 2003). Also, based on more extended schemes of this model (Childres *et al.*, 2011), the relevance of the interaction between the classroom and the wider environment is emphasised.

An outstanding Chilean public school was analysed in this research. This school has achieved outstanding historical results in almost all the effectiveness indicators measured by the Chilean Ministry of Education from 2000 onwards. Given these results, the school is the only autonomous school in its province, which is a special category given by the Ministry of Education to schools that present sustained excellence. Also, the school has obtained the maximum level of the excellence subsidy (100%) granted by SNED from 2008 onwards (more info in *Appendix 1*). Considering Mortimore's (1998) definition of effective schools, this case is interesting due to the combination of vulnerable students and outperforming results, atypical in Chile (Mizala *et al.*, 2002). This research analyses several findings that could explain the outstanding results of this school, regarding the perception of its staff, examining the different interrelations between the internal actors, success factors identified and the functioning of its instructional core.

# 3. METHODOLOGY

# 3.1. Research design

This study is based on exploratory qualitative research (Mason, 2018), using as a method Braun and Clarke's (2006) approach of thematic analysis. A case study strategy was used, following Marshal and Rossman (2016), Yin (2012), and May's (2011) guidelines. Considering the suggestions provided by Yin (2012) and Mabry (2008, cited in Alasuutari et al., 2008), the inclusion of Mountainview as an exemplified case of an effective school was based on longitudinal information on their historical outcomes (Appendix-1). Regarding Blaikie's (2010) recommendations, an interpretivist paradigm was used, in order to guide inquiry into the perceptions of the participants. The main idea was to build data-driven theoretical insights to support the subsequent construction and interpretation of the emerging themes (Charmaz, 2014).

A multi-method strategy was used for data collection, implementing 13 semi-structured interviews with school staff and non-participant observation of 3 classrooms. Data from interviews was used as primary data. The interview process was developed following Mason's (2018), Bryman (2012) and Roulston's (2010) suggestions. Interviews considered pre-established general topics but giving flexibility using open-ended questions. The classroom observation method was included following Marshall and Rossman's (2016) suggestion on the importance of this tool to promote better inquiry in social settings. The interviews were audio-recorded and observations video-recorded. Class observation was employed to support primary data through triangulation.

# 3.2. Participants

The sample was selected using purposive sampling based on convenience (Alasuutari *et al.*, 2008), including diversity of characteristics such as age, gender, years of service, subject and grade. The sampling strategy was conducted by the researcher together with the school principal, who had a

better knowledge of the representativeness of the school's staff. For the interviews, 10 teachers from different subjects and grades and 3 school leaders were included. For the class observation, 3 teachers were included. The minimum years of service at the school among informants was 3 and the maximum was 20, with an average of 11.9. The average age of interviewees was 47.8 years old. The incorporation of members of the leadership team in the sample was carried out in order to develop a wider cross-contextual comparison (Mason, 2018) between the perceptions of teachers, who are inside the instructional core, and the view of school leaders, which are outside of it.

# 3.3. Analysis and procedure

A computer-assisted analysis was developed using NVivo 12. A mixed method was included, implementing a deductive-inductive analytical strategy (Marshall and Rossman, 2016). The main three organizational categories of this research were established using a theoretical-driven approach, using the Instructional Core model to set the initial codes: students, teachers and content. Subsequently, in the coding process, emerging sub codes were allowed to arise, considering a data-driven approach (Bryman, 2012).

The analytical procedure used followed Braun and Clarke's (2006, pp.87) phases of thematic analysis. Firstly, the data corpus generated was reviewed and transcribed by the researcher in order to obtain the data set, achieving familiarity with the data set through multiple readings. Each data item was incorporated into NVivo 12 in Word files. Following Marshall and Rossman's (2016) suggestion, given that the researcher is a Spanish native speaker, the analysis was conducted in Spanish in order to avoid translation issues. Secondly, initial codes were generated from each item, using a data-driven approach. Each emerging code was incorporated into any of the three pre-established initial codes. Each data extract was incorporated into one or more emerging codes, through pivotal insight and analytical connections. Thirdly, the subcodes that emerged were grouped into potential themes. Fourthly, all the themes were contrasted with the conceptual framework. 3 main categories, 13

themes and 40 codes resulted from the thematic analysis. Fourthly, a name and clear definition for each theme were incorporated, using the theoretical framework as guideline.

### 3.4. Ethical considerations

This research was presented to the Ethical Committee of the School of Education at Glasgow University, which provided ethical approval. For all ethical considerations, this study considered BERA's (2018) guidelines for education research. The participants were recruited using a voluntary call, through an invitation by the researcher and the school principal.

For interviews, all the participants signed an informed consent. For class observations, students' parents also signed an informed consent. A participant information sheet was prepared and delivered to all the informants, informing about the research and their right to withdraw. All documents were available in English/Spanish. All participants were allowed to ask questions about the research, and all questions received were answered.

All information obtained was used under confidentiality. Names of informants have been replaced with pseudonyms. As an extra precaution to avoid identification by association of inference, all possible information related to the identities of informants in quotes was removed. Participants did not receive incentives for participating. Information about research outcomes will be delivered to the informants at the end of this study.

# 3.5. Limitations

The limitation of this research, similar to most qualitative study-cases (Bryman, 2012), is that findings are not generalizable. In order to tackle this limitation, the focus of this study was not generalization but relatability. According to Bassey (1981), the importance of case studies in education is to provide sufficient and appropriate detail to facilitate the use of this information by

other practitioners that work in similar contexts. It is not the aim of this research to reach extrapolatable results, but to provide thick descriptions in order to allow to the reader to make their own analysis of the findings (Mitchell, 1983; Bassey, 1981). Following Blaikie (2009) and Yin's (2012) suggestions, the information provided in the results section was structured mainly in an exploratory and descriptive manner. Considering Gomm et al.'s (2000) criticisms of relatability, the discussion section states that this study does not aim to provide examples of best practice for replication.

# 4. RESULTS

Considering the 3 categories related to the instructional core, 6 themes were identified for teacher effectiveness, 3 for student effectiveness and 4 for content effectiveness. Several codes were included to explain each theme. Figure 9 shows the project map.

# 4.1. Teacher effectiveness

For this category, 6 themes were identified, which are composed of 16 codes. Figure 10 shows the distribution of themes and codes.

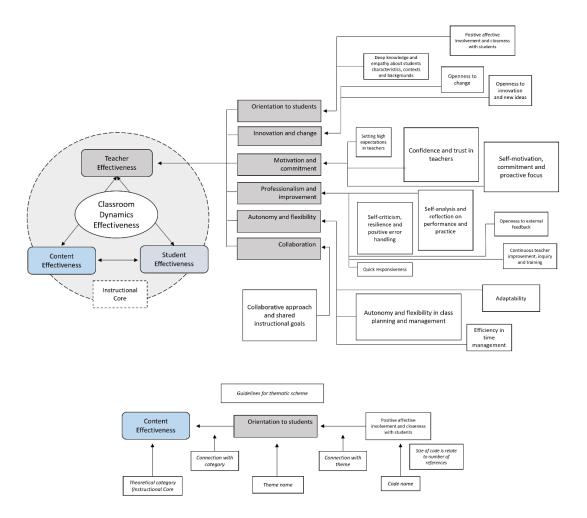


Figure 10: Teacher effectiveness map

Source: prepared by the author

Supporting strategies for underachieving students Motivation and emotions Professionalism and improvement Differentiation Setting high academic and personal expectations Continuous teacher improvement, inquiry and training Promotion of self-confidence and self-esteem Appreciation of diversity and equity Quick responsiveness Openness to extern feedback Use of intentional Promotion of motivation, participation and engagement Active engagements with students' families Self-analysis and reflection on performance and practice Self-criticism, resilience and positive error handling Leveling of content complexity according students' abilities Use of students own life experiences and previous knowledge Orientation to Deep knowledge and empathy about students characteristics, contexts and backgrounds Positive affective Avement and closen with students Encouragement of metacognition and thinking processes Openness to innovation and new ideas Openness to change Effectiveness Student Positive error handling approach, communication and shared instructional Dynamics Effectiveness Instructional Effectiveness Classroom Teacher Collaborative Core goals Collaboration Learning environments Change of learning environments Content Effectiveness Efficiency in time management Autonomy and flexibility in class planning and management Autonomy and flexibility Use of progressive assessment strategies Results-oriented pedagogical approach Content Assessment Adaptability Curricular contextualization based on students' needs Innovation and creativity in curriculum implementation Confidence and trust in Strategic planning of learning processes commitment and proactive focus Self-motivation, Curricular flexibility in class planning and management Motivation and commitment Content Implementation Content adaptations Active use of technology in learning process Use of playful learning strategies Practical adaptations of curricular content articulation among subjects Curricular Connection with category Teacher

Figure 9: Project map for the thematic scheme

Source: prepared by the author

# 4.1.1. Autonomy and flexibility

All participants reported autonomy and flexibility in classroom planning and management as one of the most important perceived factors (13 informants, 77 references; the largest code in the thematic analysis). Teachers stated high levels of independence within their classrooms, where they are able to make decisions using their own discretion and professional judgment:

There is autonomy in relation to what happens in our classrooms. With autonomy, I'm referring to the whole decision-making process. I evaluate what distribution of time is the best for my classes, I decide what materials, methodologies, and strategies I will implement with my students (teacher).

Autonomy and flexibility are used by teachers to define several elements in the classroom, such as time management, content adaptations, curricular coverage strategies, selection of methodology and materials, class activities, articulation among subjects, choice of learning environments and assessment strategies. Also, teachers perceived that extended freedom in lesson planning is one of the key aspects that explains their performance. They are able to use their own models and strategies, adapting planning according to students' needs:

The school asks for an annual plan of each subject, but as a teacher, you have all the freedom to adjust times and activities during the execution of the classes in the most appropriate way (teacher).

School leaders understand the importance of this autonomy to achieve good results, providing high levels of independence to teachers as long as they meet the established accountability standards for curricular coverage and student learning outcomes. Informants defined all this as regulated autonomy:

This is not about autonomy based on what the teacher wants to impose, but rather it's teaching autonomy that is socialized and discussed with my bosses and colleagues (...) In this sense, it could be said that it's a kind of "regulated"

autonomy" (teacher).

Participants connected autonomy and flexibility to the promotion of teacher adaptability (13 informants, 51 references) and efficiency in time management (13 informants, 29 references). There was a shared perception that teachers' independence allows them to adjust readily to different lesson conditions:

When I determine that the class did not turn out as expected, for the next class I tend to change the strategy. I return to the contents of the previous class, but from another strategy, changing the example or the way I'm delivering that content (teacher).

This autonomy allows teachers to use their own discretion to determine the most effective organization of time. As a consequence, there is a shared perception among teachers that they are not under unnecessary pressure doing their work: "Imagine that for us planning is not a stressful process, but rather a space to talk and share with your colleagues" (teacher). Hence, they are able to invest their time in aspects considered more crucial for their work. They appreciate this autonomy, comparing it with the reality that they perceive in other schools:

I see their [teachers from other schools] work, and they're always full of paperwork, full of administrative stuff and forms to fill out. Then, when they have free time, they use it filling administrative issues. Instead, we use that valuable time to look for new strategies for our students. Here you invest your time in what is important, in how to make a better class (teacher).

It was also possible to observe strong teacher commitment to using their autonomy responsibly, adapting their work to different classroom realities and taking advance of their available time in the best manner possible, always in benefit of their students' learning.

# 4.1.2. Motivation and commitment

The informants reported *self-motivation*, *commitment*, *and proactive focus* as key success factors in classroom dynamics, being the fourth largest code in the thematic analysis (12 informants, 65 references). There is a strong shared idea of the importance of teachers' role and its impact on learning. Teachers internalized this self-responsibility as a type of *professional duty*: "we believe that it is our responsibility that students learn, and that will depend on how we teach them" (teacher). This internalization promotes among teachers a high self-demand:

That is the great challenge, we are measuring against ourselves, we do not measure ourselves in comparison with anyone (...) I'm very demanding with myself, and that is passed on to the students because they can always give more (teacher).

Teachers assume this self-responsibility with a powerful sense of empowerment, a perception which is also shared by school leaders: "here it's easy to work, in the sense that teachers know what they have to do, so you don't have to be on top of them" (leadership team). Teachers reported efforts to find the best strategies to promote better learning in their students, even though that means hard work. Informants justified these efforts due their sense of gratitude to the school:

Sometimes you feel that with the time available you cannot see everything you want with the necessary depth, so if I need some extra hours out of my day, I do it. I stay because I want to, nobody asks me to, because I see the motivation of the students (...) and this attitude is not only mine, but I observe it in most teachers. I never saw this in other schools (teacher).

Teachers explained that this commitment is mainly supported by the high level of confidence and trust in teachers in the school, which is the third largest code

(12 cases, 66 references). This connection is illustrated in one slogan created by teachers:

I reiterate and insist that this trust is key. Last year we were in a meeting and we were talking with a new teacher, and I asked him how his adaptation process had been, insisting on this culture of commitment that exists here. The teacher told me that, unlike his previous experiences, trust exists here, and when there is trust, commitment is generated. At the end that became a kind of slogan among teachers for a while: "*Trust generates commitment*" (teacher).

Regarding this *culture of commitment*, there is a shared positive view among teachers of the way that the leadership team recognizes and supports them. The leadership team is active to promote leadership among teachers, including them in school-wide decisions. Teachers reported that the school does not have a standardized supervision mechanism to monitor teachers' performance. All supervision is discussed and agreed in advance between school leaders and teachers. The objective of this strategy is to create an atmosphere of dialogue, perceiving the supervision as a support tool: "here nobody watches us supervising if we are doing our work. Here everyone knows what they have to do and will endeavour to comply, and the leaders know it" (teacher). This lack of standardized supervision does not mean a total absence of monitoring. The leadership team used the concept of *classroom accompaniment* to define their supervision mechanism:

The concept of classroom accompaniment was installed, without a vision of supervision or surveillance. The management team can go to the classroom, without a guideline or standardized topics, be with the teacher and see their progress (leadership team).

Teachers remarked upon this sense of trust repeatedly: "one of the things that makes us successful as a school is the leaders' trust in us as teachers and our decisions" (teacher). Part of this perception of trust is based on the credibility that the leadership team has in teachers:

I worked a lot of my work experience in a subsidized private school, and the big difference I can see between that establishment and this school is the trust that this school has in teachers. Teachers here are treated as experts in what they do (...) here the leadership team believes in what I do as a teacher (teacher).

Another element reported was the connection between teachers' commitment, and the *setting of high expectations* for teachers (11 informants, 21 references): "a teacher will not be able to promote high expectations in his students if we as managers don't generate high expectations of them. That's why I always tell them, teachers, you can do it" (leadership team). Those high expectations positively affect the proactivity of teachers:

Although we know that constantly generating new ideas and teaching strategies takes time, and sometimes generates fatigue in us, this effort is nourished thanks to that feeling that exists within the school to promote high expectations. And I don't mean the expectations of the students necessarily, but the expectations that the school has of me as a teacher, that I know they are high. And that invites me and encourages me to be constantly looking for new ideas (teacher).

## 4.1.3. Professionalism and improvement

Teachers reported a continuous *self-analysis and reflection* on their *performance and practice* (12 informants, 40 references), examining in detail how their work impacts students' learning. It was possible to identify permanent self-judgment of their actions, analyzing how their own strengths and weaknesses can affect their performance:

I say when I passed certain content and a certain course, I did such a thing, but that did not work out, or I did not achieve the objective (...) I cannot say that all my classes are successful, because it is impossible. But there is a space for reflection, to see what I did wrong and how I can improve it for the next class, to see my weaknesses (...) I do a self-analysis and self-criticism, and I see what I failed and why (teacher).

Most of this analytical process is developed by teachers sharing their experiences among peers: "sometimes I consult other colleagues or the head teacher, to get ideas to make the corresponding improvements" (teacher). Also, the leadership team has created two formal strategies to support this reflective process. One is *technical meetings*, which are sessions where teachers from one subject or level share their pedagogical practices, analyzing students' learning outcomes and detecting improvement needs. The other strategy is called *mentorship*, where a senior member of the teaching staff supports other teachers who present difficulties:

When I need the support of one of these teachers that we catalog as mentors, I meet with one of them and I personally comment on the areas of support that have been detected in a colleague (...) after this analysis, they give their contributions, mainly focused on pedagogical strategies that have applied in the past with good results (leadership team).

Teachers also reported the relevance of adopting a professional approach based on *self-criticism and resilience*, accompanied by a *positive error handling* (12 informants, 34 references). Teachers tended to adopt an open and critical approach to evaluate their own errors:

When something that was planned in class doesn't work out, I readjust many things, actively looking for where I failed and why that happened (...) I dedicate time to rearranging activities, trying to change the focus and understand why the students are not understanding me (teacher).

This openness to communicate errors is due to a *safe school environment* described by teachers, where teachers are able to openly criticise their own performance and seek help: "I'm not ashamed to ask if I don't know something, and my colleagues are not going to reject me if that happens" (teacher). Therefore, teachers are not only *open to external feedback* (11 informants, 26

references) but are actively looking for it. Feedback is seen as beneficial and useful:

(...) criticism is very necessary, I'm open to receiving criticism and I also do it with my colleagues, always maintaining a climate of respect (...) we end up thanking others for their criticism because it allows you to reflect on your management and see where I may be failing (teacher).

This safe environment is actively promoted by the management team, encouraging a positive view of errors as learning opportunities: "the teacher's error is always analysed under the scenario of promoting an exhaustive pedagogical dialogue" (leadership team). Hence, the leadership team is careful to communicate their criticism with empathy:

Although teachers are quite humble and open to accept feedback and criticism, we as leaders are also very careful to respect the career and experience of our teachers (...) one must give feedback in a very humble way, using a lot of judgement, trying not to establish criticism in a negative way (leadership team).

This positive approach is well-recognized by teachers: "when there are problems achieving progress, there is no bad attitude from the head of the technical unit; on the contrary, they give recommendations to support us" (teacher). This safe environment promotes among teachers a *quick* responsiveness (9 informants, 17 references) to find and apply solutions:

When I detect that the learning objectives are not met as I expected, I tend to be self-critical and seek help. I go to my colleague who teaches the other course at the same level as mine and I tell him about my problem (...) if that doesn't solve my problem, due to more complex situations, I turn to the head of the pedagogic technical unit (...) and the boss gives us suggestions so that we can solve the difficulties. All these recommendations I try to apply immediately (teacher).

In this context, teachers establish a shared perspective about their professionalism and improvement: "all teachers have the same view that they want to be excellent in every way, they want to make this school the best school" (teacher). This shared view promotes a tendency towards *continuous* teacher improvement, inquiry, and training (12 informants, 29 references):

When they entered the school, they didn't take a position where they would keep the knowledge and practices they already had, but they were motivated to train, inform themselves and research. They are researching their subject, analyzing results (leadership team).

This teacher improvement process is strongly based on data, which is provided by the leadership team: "a fundamental axis is to guide our management with data. And teachers are requesting this information, since it is very useful to guide their work, and sometimes they make decisions based on this" (leadership team).

Lastly, all teachers reported the importance of self-taught training. This approach is widely used among teachers: "I always try to research everything I can about the contents that I have to work on, as a kind of personal preparation, looking for the best strategies" (teacher).

#### 4.1.4. Collaboration

Informants reported a *collaborative approach*, *communication* and the setting of *shared instructional goals* as relevant success factors (13 informants, 74 references), being the second largest code. Seniors teachers explained that the collaboration observed was gradually developed by the staff:

At the beginning, everything was very complex, we had students who had very disruptive characteristics (...) Then we felt among the teachers who started the school that we had no other choice but to unite against all these problems that we had to face. And we began to share, to plan the classes together, to see what

gave us good results, to give each other recommendations, because we had to overcome all this. What began as a way to face a difficult context, was installed as a culture and became a habit among us (teacher).

This concept of *collaborative culture* was constantly remarked upon: "here you can see a culture of collaboration among teachers" (teacher). According to informants, this culture is characterized by the shared conception of the importance of teamwork:

The collaborative work here is immense, the exchange of experiences that you have in the classroom with your colleagues is very positive (...) here the important thing is not the success of one person. If I'm doing well, it's good for everyone. Nobody here is a star (...) we don't compete among colleagues (teacher).

The approach is supported by the idea that every member of the school is relevant: "we're all important here, nobody is more than another. We're all leaders" (teacher). Teachers constructed the idea that success must be shared: "we can't fall into selfishness and believe that our achievements are individual. If I do well in SIMCE and my colleague doesn't, that doesn't mean that I'm better than him. Here if we do wrong, we're all wrong, and if we do well, we're all good" (teacher). Surprisingly, this strong collaborative ethos was not based on formal efforts undertaken by the school:

It's not a formal policy, it's not written anywhere, but we all share the belief that if a person on the team is doing well, the school is doing well. In the end, everyone's goal is that the school has good results (leadership team).

Another element that supports this collaborative environment is low staff turnover in the school, allowing the leadership team to reinforce certain internal policies that promote high levels of collaborative work:

We know that most of the time the teachers will have continuity with the courses (...) and as there is no turnover of teachers, they follow the students' progress

cycle (leadership team).

Some teachers described a degree of difficulty for a new teacher to adapt to this collaborative culture, taking between 1 and 2 years to achieve proper integration. Even though the staff is highly supportive with new teachers, they tend to be vigilant in order to protect this positive climate:

I remember that the second year everything was much easier. That year the vision that the other teachers had of me changed. They evaluated me and everything went well. Because of that, I began to have more participation in the school, and a kind of right to voice and vote (...) the first year was a bit difficult because I had to know the internal system, but in the end I could do it (teacher).

The shared goals of the school are highlighted by leaders from the very beginning, giving new teachers relevant guidelines about the school's priorities. The leadership team stated the importance of a shared view of the school's success:

All teachers here have a shared vision of success within the school, of always being the best, of being a competent teacher, of trying to be outstanding. Then when the time comes for them to be evaluated externally, everyone collaborates, everyone opens doors (leadership team).

## 4.1.5. Student-orientation

In relation to the orientation towards students, participants reported several efforts in order to promote a *positive affective involvement and closeness with their students* (12 informants, 30 references), explaining that this emotional connection between teachers and students was one of the first goals when the school started:

When this school started, we received students from different schools, many of them with very complex social contexts (...) so, one of our main objectives to generate a common school culture was to work with affection. In this context, we thought that the first thing we had to do, before focusing on academic performance, was to give them affection (teacher).

This approach was focused on the construction of a kind of *safe classroom environment*, where students can feel comfortable: "this is not only about giving them affection and concern, but also taking care to give them dignity" (leadership team). One of the main objectives was to avoid social issues related to the vulnerability of students' backgrounds arising within classrooms:

The student feels safe and free of any risk in the classroom because they are treated well, they are given all the possible tools, and above all, they are given love and affection so that they respond well. If they witness situations of violence, which are common in their social environment, they will see it outside of school, but inside the school, they will not see students fighting, or teachers with violent attitudes (leadership team).

This safe classroom environment promotes higher confidence in students to meet academic goals, due to the perception of protection: "if you observe any class, you will notice that the students are not afraid to ask (...) that creates in them a sense of belonging to the school and urges them to strive to have good results, because they feel safe" (teacher). Teachers are concerned with being seen not as strict authority figures but as human beings, with feelings and emotions: "they don't see the teacher as someone distant who is above them, but as someone close, involved, who has emotions" (teacher). Nevertheless, teachers are aware of the importance of maintaining appropriate levels of control, ensuring that this emotional bond cannot be misinterpreted by the students as a lack of authority: "closeness is not about letting students do what they want and disrespect you, but about giving them your work, treating them well" (teacher).

Linked to this positive affective involvement, 10 informants also reported as a success factor their *deep knowledge and empathy about the students'* characteristic, contexts, and background (10 informants, 29 references). Some

teachers highlighted this aspect as a priority for lesson planning: "first of all, my main priority with the students is to know them, in the sense of understanding their difficulties, their personal contexts" (teacher).

# 4.1.6. Innovation and change

This theme is composed of two codes that were interconnected in the analysis: openness to innovation and new ideas (12 informants, 37 references) and openness to change (12 informants, 31 references). Teachers reported a proactive focus to present new ideas and use educational innovation to improve the learning environment: "our goal is to break schemes. To break old teaching formats that are no longer fit for the current times" (teacher). Teachers are constantly presenting initiatives, working together with the leadership team: "in this school, the principal has always been very open to our ideas" (teacher). Teachers tend to connect these educational innovations with classroom issues that have been difficult to overcome with traditional pedagogical approaches.

A wide range of innovative initiatives could be observed within the school. Inside classrooms, participants described several activities such as thematic classrooms for each subject, change of learning environment, use of project-based learning, flipped classrooms and implementation of the Singapore method. Also, several innovative extracurricular projects were described, such as reading corners, a small library which is operated by the students, the mobile supermarket (a simulated supermarket where students can learn mathematics), directed class breaks (implementation of playground activities to promote positive values), debate contests and thematic fairs.

It is important to note that all these innovation projects described by members of the school are not requested by the Ministry of Education. Conversely, all ideas were presented and developed without external guidance: "we cannot wait for them [external education authorities] to tell us what to do. We must as a school be active in doing things. We cannot wait for them to come and tell us to take an innovation workshop to start doing new things" (leadership team).

### 4.2. Student effectiveness

For the student category, it was possible to identify 3 themes, composed of 13 codes. Figure 11 shows the distribution for this theme:

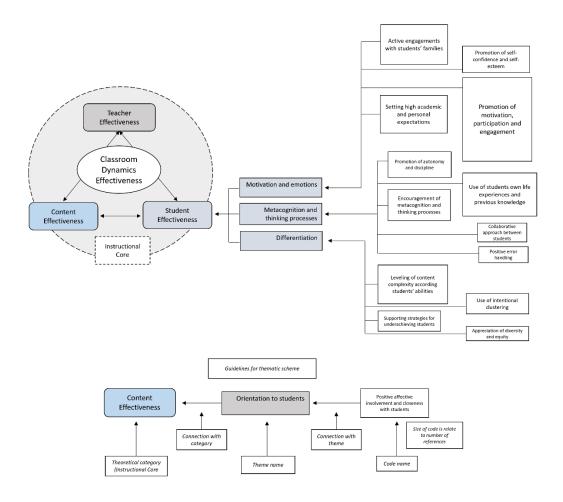


Figure 11: Student effectiveness map

Source: prepared by the author

## 4.2.1. Metacognition and thinking processes

12 informants reported, as an element relevant to students' performance, the continuous *encouragement of metacognition and thinking processes* (12 informants, 32 references). Teachers pointed out that they develop several

pedagogical approaches specifically to promote meaningful learning: "when I give them new content, I often ask them to initially investigate it, to analyze the content, to invent proposals about that content so we can take that knowledge into practice" (teacher). Teachers are active in promoting analytical approaches in their pupils, using strategies such as questioning, flipped classroom, scientific method, practical and playful learning, problembased learning, discovery learning, fieldwork and change of learning environments:

From the beginning to the end, I try to focus the whole class from the perspective of what kind of analysis my students can develop of specific content. I try to implant in them that analytical outlook (teacher).

Teachers tended to prioritize quality above quantity in curricular coverage: "sometimes I did not reach 100% of the objectives or contents, but those that were covered were achieved well, with a satisfactory level of attainment for the vast majority of students" (teacher). This encouragement of metacognition is interrelated with *positive error handling* (9 informants, 16 references). Teachers shared the perception that errors are an important part of the learning process: "when my students are wrong, I tell them not to worry, that's what I'm for, to help them learn" (teacher). This aspect is used strategically by teachers to encourage thinking skills among students:

When they didn't do something right, I analyze it with them and help them discover their mistake. Don't tell them what is wrong; on the contrary, they will realize the error, based on what I asked. They have to understand why they were wrong and I ask them questions so that they realize (teacher).

Curricular adaptations play an important role in the promotion of metacognition. Therefore, *Students' own life experiences and previous knowledge* (10 informants, 43 references) is used by teachers to connect curricular content with student's previous knowledge: "I try to contextualize it

as best I can, using the experiences they have, asking what interests them, looking for material to which they have access" (teacher).

According to teachers, these adaptations based on the students' backgrounds facilitate their learning process, promoting a better anchoring of content: "I always look for news from our own city, and I try to link the content with that news that I know they know or are aware of. In this way, I know that they will be better able to appropriate that content" (teacher). Teachers take advantage of their autonomy in class planning to create adapted lessons.

Participants also identified as a success factor in this theme the *promotion of autonomy and discipline* (13 informants, 29 references) and the promotion of a *collaborative approach between students* (8 informants, 8 references). Teachers explained that the process to achieve appropriate levels of discipline among students in the classroom has been long and ongoing:

But this strong orientation toward discipline and respect that is seen in students is not a coincidence but is due to the hard work of teachers, in always reinforcing the rules of discipline and also promoting and ensuring that these rules must be respected (teacher).

This orientation toward discipline has gradually reinforced students' autonomy, putting them in charge of their own learning process: "the culture of the school has meant that the students learn because they want to learn, not because we are forcing them to do it" (teacher). Metacognition and thinking processes among students are also reinforced thanks to ongoing student collaboration. This is used strategically by teachers to reinforce values such as respect, responsibility, autonomy and solidarity. Teachers tend to actively use peerwork, creating clusters between students with higher and lower performance: "On the one hand, it helps the most advantaged students, because they practice what they already know and it is challenging for them to support their classmates, and those who have more difficulties are also benefited by learning from another classmate who has a closer language (teacher).

#### 4.2.2. Motivation and emotions

The promotion of motivation, participation, and engagement (13 informants, 55 references) among pupils was the most referenced code in the student category. All participants reported the importance of establishing a positive classroom climate in order to promote motivation and engagement. These efforts to establish a positive physical and psychological learning environment were connected to the idea of providing the minimum conditions to develop a proper instructional process:

They know that here they have their school supplies, here they receive everything they need thanks to the resources that we receive from the preferential school subsidy law. We also provide food (...) so, if the student arrives in an environment where he has all those conditions, a modern and clean classroom, with technological resources, with audio, computer, digital whiteboards, then obviously the student is happy (leadership team).

Teachers reported efforts to create motivating lessons to encourage student engagement: "when I look for resources and materials I try to find the most entertaining thing that I can find for them, always putting myself in their place" (teacher). Thanks to all these actions carried out by teachers, it was possible to observe a high commitment of students to the school, creating a kind of sense of belonging: "we have a turnover level between 10 and 12 students per year in general, of 690 in total. There are courses that don't have major movement" (leadership team).

Teachers reported using students' emotions as a key motivational trigger. The objective of this is to incorporate a connection between emotions and curricular content to promote meaningful learning: "there is a lot of work that is done in this sense on an emotional level with the students. I think that if the student is not engaged when studying, it is difficult to generate meaningful learning" (teacher). This emotional component is also supported thanks to the

teachers' efforts to set high academic and personal expectations (11 informants, 37 references) and promote self-confidence and self-esteem (10 informants, 19 references) among students: "it is totally forbidden at school to tell a student that he is not capable of something. They are always told, within their capabilities, that they can do things" (leadership team). 11 informants declared the existence of a culture of high expectations in the school, highlighting a saying that was created in the school and is used in every class by teachers: 'I want, I can, I achieve it':

They already have that mentality that if they want, they can achieve it. Every day (...) we reinforce this idea of "I want, I can, I achieve it" because we want them to feel capable of doing it (teacher).

This culture is based on the idea that all students are capable of learning, regardless of their differences: "teachers at this school are professionals with high expectations in their work, and they generate high expectations of their students, believing that everyone can learn" (leadership team). Teachers reported a clear understanding of the complexities of their students' vulnerable backgrounds, making major efforts to counteract these factors and not categorize them using unnecessary prejudices:

I'm always stimulating my students, telling them that they can do it. For example, I took some students who repeated the first grade. When I spoke with the parents, I told them that for me they were not repeating students, but new children, that they should not tell me the bad things about them. I told them that I wanted to discover the students, not predispose myself, to know their strengths and weaknesses and based on that, to see how to approach them. The other day I gave the report card to one of the mothers, and she started crying over the good grades, and she was very grateful (teacher).

The informants explained that this culture was developed under the idea that education is the only real opportunity that their students have for a better future:

We must consider that we don't select students, like private schools, we receive very confrontational students (...) we try to show them that there are other options, that there are other realities, to encourage them that we have high expectations of them, that they are capable (teacher).

To reinforce this mentality of overcoming difficulty, teachers reported major and long-term efforts to improve students' confidence and self-esteem, as key aspects to promote high expectations: "we work hard on the students' self-esteem, their self-confidence, we always reinforce by telling them that they can, that they are capable of achieving what they propose" (teacher). Therefore, teachers strongly avoided the promotion of competition among students or incorporation of punishment systems. Conversely, they reported always reinforcing all improvement that students demonstrate:

We work hard on students' self-esteem, where small achievements are congratulated and highlighted. I try to persuade students that they can achieve what I'm asking them to do. Maybe they cannot achieve 100% but, in any case, they will have progression (teacher).

Another important code in this theme was *active engagement with students'* families (10 informants, 39 references). Participants remarked upon the relevance of the inclusion of parents within school activities: "something key to creating this trust with the students is also to establish bonds of trust with their parents" (teacher). Parents are actively involved in order to promote an alignment between the school and the interests of families:

The teacher is called to generate that bond with the parents, in order to show them that what we do in school is a contribution for his children, that the student is safe inside the school. We try to transmit that safety (leadership team).

Parents are involved in a large range of activities at the school, having an important role in activities to support underachieving students:

(...) teachers had difficulties in mathematics, specifically in geometry content (...) we started holding workshops for parents (...) with simple materials, the same ones we used with students, showing parents how we did it in school. Then we modeled an accompaniment process for home, where we taught parents how, using these materials and strategies, they could help their children in a simple way (leadership team).

Through these reinforcement activities, teachers tend to be active in promoting high expectations among parents, showing that any student is able to learn with the appropriate support:

Often, the trust that they see that I, as a teacher, have in my students causes them to also strengthen their confidence in their children's abilities. By creating that basis of parental confidence in children's abilities, they gradually raise their expectations of them (teacher).

## 4.2.3. Differentiation

9 informants reported the importance of differentiation in the classroom as a relevant success factor. According to teachers' perceptions, this differentiated instruction is mainly based on 4 types of actions within the lesson: *levelling of content complexity according to students' abilities* (7 informants, 27 references), *use of intentional clustering* (8 informants, 20 references), *supporting strategies for underachieving students* (9 informants, 18 references) and *appreciation of diversity and equity* (6 informants, 15 references).

Regarding the process of content leveling, participants pointed out that they make efforts to create a proper balance between the level of complexity-difficulty of content and students' characteristics:

My decisions are based on the analysis I make of the content that I have to address (...) certain contents have much more complex concepts, which are rather abstract (...) and initially difficult for them to understand. On the other hand, there are contents that are easier for them to understand (...) obviously I

must do an analysis comparing these contents, and then I decide where I'm going to invest more time (teacher).

Teachers use their previous knowledge of their students extensively to undertake levelling: "I always use my previous knowledge about the different courses and students, especially the strengths and weaknesses that they present" (teacher). Teachers showed flexibility to adapt their teaching strategy to proper level of complexity: "Sometimes I plan an activity, but then I decrease the degree of complexity if it doesn't work, in order to reinforce students' confidence. Then I make them come back to the most difficult exercises" (teacher).

The use of clustering in the classroom was also reported by informants, especially as a way of supporting underachieving students. Extensive use of mixed-ability grouping was observed, creating groups with higher and lower performance students, promoting a peer effect:

I detect which students have better performance and I pair them with students who present difficulties so that among them they can collaboratively undertake the activities within the class (...) sometimes they understand content better when they learn it from a peer (...) that strategy has helped me a lot (teacher).

Teachers reported several strategies to support underachieving students, such as workshops to reinforce content, parent workshops, tutoring and reinforcement work with the scholar integration programme.

Informants also reported the relevance of delivering equal opportunities to all students, avoiding discrimination. Diversity is not only accepted in classrooms but strongly promoted: "teachers are concerned about giving all students the same opportunity to participate in the classroom, in all kinds of activities in which they are immersed, whether extracurricular or formative" (leadership team).

## 4.3. Content effectiveness

For the content category, it was possible to identify 4 themes, which are composed of 11 codes. Figure 12 shows the distribution for this theme:

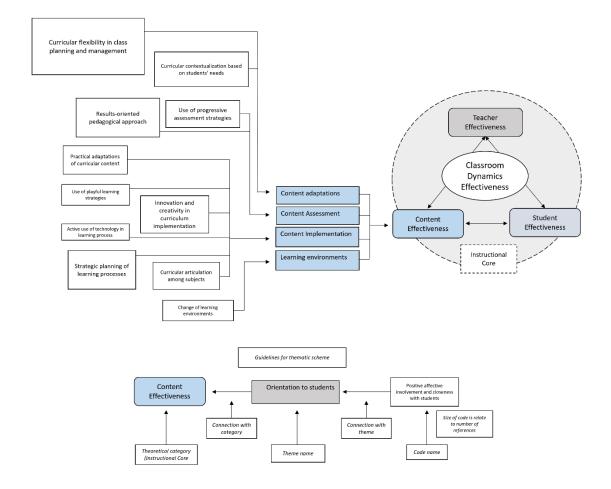


Figure 12: Content effectiveness map

Source: prepared by the author

# 4.3.1. Content adaptations

All participants remarked upon the existence of a *curricular flexibility in class* planning and management (13 informants, 63 references). This code was the most referenced in this theme. Teachers are autonomous to implement the curriculum as they consider appropriate:

Considering that the national curriculum has a flexible nature, I proposed to the first cycle teachers (...) that if they observed that there were certain contents that required a greater investment of time, they could manage the weekly hours freely, or also, that they could articulate different subjects (...) to the second cycle's teachers (...) I suggested that they be able to negotiate the hours between them. If they realize that certain curricular contents are more complex and that they cannot cover them within their pre-established hours, they can negotiate with other teachers with whom they can coordinate (leadership team).

Teachers are able to manage their time in the most efficient manner to achieve the content coverage goals. They reported using their own discretion in order to analyze the most appropriate coverage strategy, promoting a proper balance between time and formal curricular requirements: "The commitment that must be fulfilled is that all the contents required by the curriculum must be addressed by the end of the year. If I spend longer on one content or the other, or how I order my time to achieve that goal, that is my responsibility and I have independence on that" (teacher).

Although each teacher can exhibit different curricular coverage strategies, the general outcomes tended to be similar among classrooms: "in general, all courses are 89%, 90%, 95%, 100% compliance (...) so, there is no subject that has less coverage than that" (leadership team). Teachers also remarked upon the importance of this curricular flexibility, comparing it with their experiences in other schools:

The big difference here with other schools is that it's not necessary for me to stick with curricular planning as it is. In the other school there was always the rigidity of what the paper said (...) I had to do what the paper told me I had to do (teacher).

Teachers emphasised that they always prioritize students' needs above the curriculum's standardized demands: "we plan based on student needs, not curriculum needs" (teacher). To strike the proper balance, the use of *curricular* 

contextualization based on students' needs was reported (11 informants, 34 references).

Teachers remarked upon the importance of generating a link between curricular content and students' realities, perceiving these actions as crucial to promote ownership of the learning process. Teachers see curricular contextualization as an indispensable stage of class planning: "it's not that I arrive at the class and improvise contextualization. First, I analyse the contents of the class and based on that I prepare the materials" (teacher). Participants reported frequent adaptation of materials and use of practical activities, which enable students to connect abstract content with everyday elements of their lives: "I take many everyday examples from their lives, as I mentioned, from their environment, from what they know" (teacher).

## 4.3.2. Content implementation

Another success factor reported by school staff was the *strategic planning of learning processes* (8 informants, 30 references). This planning is not bound to specific lessons, but considers the whole learning process. Teachers remarked upon the importance of having a broad perspective of students' learning progression, creating proper connections between lessons, units, grades, and cycles: "we understand the learning process as continuity and not isolated units" (teacher).

This strategic approach requires teachers to be highly organized and methodical about the curricular implementation, using autonomy but also precision: "you must be orderly, be very careful to know the programmes, curriculum, contents, and determine the times for each unit" (teacher). Given this holistic perspective, teachers are aware of the relevance of supporting the pedagogical work of their colleagues. For instance, it is a highly respected practice that all classes must start and finish on time. Also, teachers use data from different evaluations developed by the school, aligning this strategic planning with

information linked to students' learning progression, promoting this ongoing cycle of learning:

We work a lot in this school using data to guide our management. Therefore, if I have 7% of students who didn't achieve or are in their initial level in the fourth grade, the teacher who takes this 7% in fifth grade, he already knows who these students are, so the teacher already knows who should be given more support (leadership team).

Other perceived success factors were innovation and creativity in curriculum implementation (9 informants, 29 references), practical adaptations of curricular content (11 informants, 24 references), curricular articulation among subjects (10 informants, 21 references), use of playful learning strategies (8 informants, 14 references) and active use of technology in the learning process (7 informants, 9 references).

Teachers pointed out that ongoing pedagogical innovation has been relevant to the school's achievements: "one aspect that has had a high impact in this school is the ability that we have to constantly renew what happens inside the classroom, incorporating innovative methodologies" (teacher). According to teachers, the main objective of this innovative approach was to create more attractive ways to deliver curricular content.

Informants reported that the use of practical activities to implement the curriculum, the incorporation of playful learning approaches and the active use of technology have been key aspects to achieve these more interactive lessons. The use of a diverse range of practical activities (role-playing, presentations, fieldwork, dramatizations, excursions, experiments, etc.) is common in the school along with the incorporation of different technological resources (projector, computers, smart whiteboards, videos, audios, Internet, etc.).

Another common practice described as a success factor was articulation among subjects: "in this school, articulation is not something that occurs in isolation,

but is present in all courses and all subjects" (teacher). This articulation is developed in different ways for the first and second cycle. In the first cycle, articulation tends to be undertaken by the same teacher (one teacher is in charge of most subjects), establishing connections between different subjects in the same grade (inter-subject). In second cycle, the articulation tends to be developed by different teachers, as each subject has its own teacher. Hence, teachers negotiate the most appropriate strategy for possible articulation.

#### 4.3.3. Content assessment

All participants declared a strong *result-oriented pedagogical approach* (13 informants, 46 references). Teachers take care to analyse the curricular objectives carefully, in order to use the most effective pedagogical approach to achieve them: "at the beginning I analyse the level of mastery of the content that needs to be achieved and above all what are the learning objectives on which I will focus the class. For me, the objectives are decisive" (teacher).

To support this result-oriented approach, teachers are careful to use their task time effectively and align most instructional activities with curricular goals. Despite this strong orientation towards academic outcomes, teachers understand that standardized evaluations are not their final goal: "we don't tell them that SIMCE is the goal because it's not. Our goal is to prepare our students well for high school (...) that they be good students and flourish" (teacher).

The leadership team also encourage the *use of progressive assessment strategies* (12 informants, 28 references) to support teachers with updated data. Alongside the day-to-day monitoring actions developed by teachers, the school implemented two key assessment systems to supervise academic progress: the monthly progressive assessment and the triangulation strategy, wherein the pedagogical technical unit together with teachers analyse students' performance: "we check students' progressive performance weekly,

between the head of the technical unit, the teacher, and the student" (leadership team).

The monthly progressive assessment system is a method in which the school applies a monthly subject evaluation in some grades. The evaluations are tabulated immediately by the leadership team, analyzing the results with each teacher, in order to provide recommendations to overcome possible lower performance. Later, teachers discuss these results directly with their students, analyzing together their strengths and weaknesses. Teachers use this data to adapt their planning and create differential support strategies for each student.

## 4.3.4. Learning environments

8 participants reported as a common practice in the school the *change of learning environments* (8 informants, 16 references). Teachers are active in using a variety of learning spaces available inside and outside the school. Therefore, they often organise study trips and fieldwork, in which the students can experience a more meaningful learning process, practicing the contents learned in real-world settings.

The school has implemented several initiatives to offer different learning environments to students using its own facilities. One of the most successful of these initiatives, according to school staff, was the implementation of thematic classrooms for the second cycle, in which each subject has its own learning environment. Each thematic classroom is designed considering the features and curricular requirements of the subject:

The organization of thematic classrooms has been a very positive strategy within the school, since we have managed to prepare workspaces with all the materials and resources necessary for a specific subject, and it's the student who must rotate (...) this strategy has allowed us to establish distinctive spaces linked to each subject, where the teacher feels more comfortable (leadership team).

## 5. DISCUSSION

This research aimed to examine the perceived success factors for school effectiveness in a case-study of an outstanding Chilean public school. As with previous similar studies in Chile (Education Quality Agency Chile. 2017a; Bellei et al., 2014; Bellei et al., 2004), it was possible to detect several school characteristics which were linked, by the informants, to the positive school effect in pupils. All success factors analysed in this research can be categorized within the constituent elements of the instructional core model and relate to the theoretical characteristics described by several scholars for effective schools and classrooms.

An important research finding was that most of the informants portrayed the school's success factors as being strongly interrelated. Although the results of this research were presented in a structured manner, with different categories, themes and codes, the description of each element by the informants was not carried out in an isolated manner but always in connection with others. This complexity of interconnection among internal success factors is concordant with Macbeath and Mortimore's (2011) analysis, suggesting that school effectiveness is not just a check-list of characteristics or best practices. These authors conclude that the characterization of an effective school is a multifaceted process. For instance, all informants perceived teacher autonomy as one of most important success factors to explain their outstanding results, being the most referenced code in the whole thematic analysis. However, all informants repeatedly connected this feature to other success factors identified, such as the collaborative approach, teacher commitment, high teacher confidence, the trust that the leadership team has in their work and student engagement, among others. Informants explained that one success factor cannot exist if the others are not present within the school. This is an interesting finding, considering Elmore's (1996; 2016) conclusions with regards to the constant failures in the implementation of best practices among schools in the US. The author, like City et al., (2009) and Cohen and Ball (2001; 1999), remarks upon the importance of understanding education effectiveness as a

complex process of constant interactions between the instructional core, its internal actors and the environment. In this case-study it was not possible to observe isolated best practices working together, but rather a whole multilayered and holistic system of interrelated, mutually dependent practices.

Informants also explained that these success factors have altered over the years. This can be explained by the ongoing nature of the educational process, remarked upon by Fullan (2002) and illustrated in both the Scheerens, and Creemers and Kyriakides's models for school effectiveness (Chapman et al., 2016; Mortimore, 1998). For example, the way in which teachers currently understand some success factors, such as autonomy, trust or commitment, is not the same as 10 years ago, when the school's goals were based on students' personal development more than academic achievement. In parallel to the improvement that the school has experienced over the years, the way in which these success factors are perceived by the school staff has also gradually changed. Therefore, following Cohen and Ball (2001; 1999), the contextual, historical and environmental factors of this school are critical to understand and explain its current outstanding results. Hence, another important finding is that, as Silver (1994) suggests, it is not possible to prescribe a standardized recipe for improvement from the success factors identified in this school. On the contrary, the current circumstances of the school are the result of a 20year process of systematic trial and error based on a strong and sustained belief among all the school's members that, as Sammons (1999) and Mortimore (1998) conclude, a school can make a difference and add value to its students' learning, despite their vulnerable backgrounds and all the complexities for public schools in Chile.

This interconnection between success factors and the role of internal school actors was also remarked upon extensively in the interviews. A clear example was that, although there were no direct questions regarding internal relationships in the interviews, school staff actively explained how all actors in the school interact in order to achieve the expected goals, including students' families. An example of this was the high value placed by teachers on the

decisions and actions undertaken by the leadership team, and, as a response, the trust, respect and commitment of the school's leaders towards its teachers. This can be explained following MacBeath's (1998) conclusions on how purposeful leadership is capable of encouraging strong relationships within a school. Remembering Manz and Sims's (cited in Davies et al., 2005, pp.95) words, that effective school leaders are those "leading others to lead themselves", we can conclude that in this school, all staff members present a certain level of leadership, whatever their role or position. For instance, when informants explained the existence of high expectations regarding student outcomes, they tended to immediately connect this to the high expectations set by the leadership team for teachers, and how these expectations impact the behaviour of teachers to promote high expectations of students and their parents. Similar to Brighouse and Woods's (2009) ideas, this school can be considered a clear example of distributed and purposeful leadership, empowering teachers, students and the whole school community to assume an active role, based on proactivity, self-reasonability and commitment. This is concordant with the literature, which acknowledges leadership as one of the most important factors in an effective school (MacBeath and Mortimore, 2001; O'Brien et al., 2008; MacBeath, 1998).

Teachers also described a wide range of opportunities to use their own discretion and professional judgement in the decision-making process, not only in their classroom but also in other decisions that impact the whole school. This element is key to understanding almost all the success factors presented in this research. According to Lipsky (1980), one of the most important obstacles in the implementation of education policies within classrooms is the lack of coherence between the interests of manager and teachers. Teachers tend to perceive education policy as restrictive for their role, due mainly to standardized accountability measures (Hjörn et al., 2010; Hupe and Hill, 2007). Repeatedly during this research, teachers compared their own context to the reality of other schools, explaining that their peers were trapped by their schools. This idea is what Bovens (2010) called an accountability trap, in which the main goals of the actors within classrooms will not be guided by teachers'

unique understanding of the students' context but by impersonal standardization of the education processes established by external actors (Murphy and Skillen, 2015; Brodkin, 2008). In this case, teachers enjoy total discretion to use their own professional jugedment to take the best decisions for their students.

All the internal supervision and evaluations processes implemented by the leadership team were aligned with this factor. Teachers connected this freedom to use their discretion with almost all the emerging themes of this research. For example, most of the actions undertaken by teachers to promote students' learning were based on this autonomy to adapt their strategies using their own situated knowledge, being able to develop several of the outstanding practises suggested by Jones (2012) or Kington *et al.*, (2015) to promote effective classrooms. Klagge (1997) explained that teachers usually tend to see accountability in a pejorative way. In this case, none of the informants perceived school accountability as an obstacle to their performance. Considering the PELP Coherence Framework (Childres *et al.*, 2011) of the Instructional Core model, this positive vision of accountability among teachers can be explained due to the coherence in the theory of change and strategy between the leadership team and teachers.

As a final reflection, this school is an example of how the *principium divisionis* pointed out by Bourdieu (1984) can be broken by the promotion of school effectiveness in the public sector. According to evidence (Troncoso *et al.*, 2016; Muñoz and Queupil, 2016; Mizala *et al.* 2002), in Chile it is almost a *de facto* situation that most public schools, where the vast majority of vulnerable students are enrolled, perform badly. Several authors, such as Francis and Mills, 2012; Reay, 2012, Stephens and Gillies, 2012, Brighouse, 2002 or Crompton, 2008, have remarked upon the lack of equity in educational opportunities between privileged and vulnerable students, above all in societies where competition between public and private education sector is promoted (Ball *et al.*, 1996; Nozick, 1974). According to Bourdieu (2003), in most modern societies, vulnerable students are educated under an *institution of insecurity*,

where obedience, docility and fear are promoted. This school goes against this current to a remarkable extent, with a firm idea among its staff that they are capable of delivering high-quality education to their students and a strong belief that all students can learn despite their vulnerable backgrounds, as Mortimore (1998) reflected in his definition of school effectiveness. Therefore, it is important to highlight that contributing to the promotion of school effectiveness among public schools in Chile is not only a technical issue but also a social justice imperative:

When we started this school, we thought about what was the best education they could have. And I remember that we all committed to that idea, and we said: "we will give them the best that we, as teachers, can give them". We wanted to make them feel good, that we respected them, despite their social vulnerability (teacher).

### 6. CONCLUSIONS

Using a case-study method (Yin, 2012) and a thematic analysis approach (Braun and Clarke, 2006), it was possible to identify several perceived success factors in the school studied, distributed into 3 main structural categories, based on the Instructional Core Model (City *et al.*, 2009) and 13 emerging themes composed of 64 codes, thus addressing the first research question of this study. Also, all perceived school success factors emerging from the analysis were directly related to the theoretical framework on differential internal practices for effective schools and classrooms, and City *el al.*'s (2009) model, answering the second research question.

Addressing the third research question, several logical inferences from the research findings were developed, concluding that, following Macbeath and Mortimore's (2011) analysis, the perceived success of this school is not supported by set of isolated practices. Conversely, it was possible to identify a complex network of interrelations among the success factors detected, reinforcing the conclusions of City *et al.* (2009) and Cohen *et al.* (2003) regarding the relevance of the interrelationships between the internal and external elements of the Instructional Core to understand school effectiveness.

Considering the low number of studies on school effectiveness using case-study approaches in Chile, this research contributes a deep analysis of a successful case of a Chilean public school, providing interesting findings with regards to internal success factors and the interactions among them which could explain their positive school effect. Further research could explore perceived success factors using case-study approaches in a wide range of public schools throughout the country, similar to other research in Chile (e.g. Bellei *et al.*, 2014), or use statistical measures to correlate some of the success factors identified with quantitative school outcomes in a larger national sample, following Dobbie and Fryer's (2013) example. Both recommendations address the limitation of this study with regards to generalization (Blaikie, 2009).

## 7. APPENDICES

# 7.1. Appendix 1: Mountainview detailed figures

## 7.1.1. Academic results in SIMCE

Analysing data from SIMCE, which is the national Educational Quality Assessment System implemented by the Ministry of Education for all Chilean schools, both public and private, it is possible to observe that Mountainview has exhibited outstanding results in this national standardized evaluation, with a progressive improvement over the years. An overview of Mountainview's results for 4<sup>th</sup> grade is presented in Figure 1.

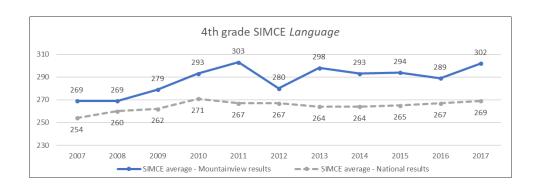
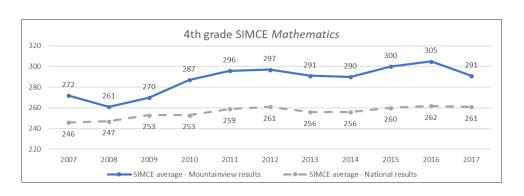


Figure 1: Mountainview's SIMCE results for 4<sup>th</sup> grade



Source: prepared by the author, using MINEDUC official data

Mountainview exceeded the national average every year from 2007 to 2017. In Language, the school exceeded the national average by 23.5 points overall, while in Mathematics the average difference was 31.4. It is possible to observe similar results for 8<sup>th</sup> grade, shown in Figure 2.

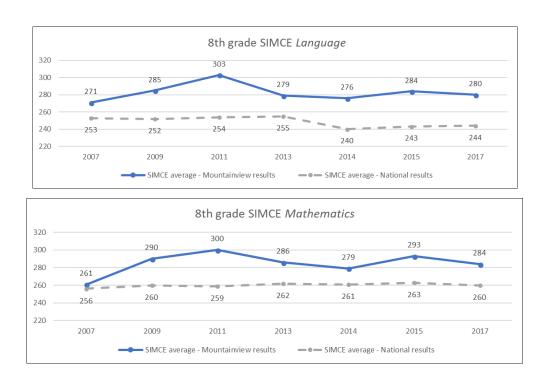


Figure 2: Mountainview's SIMCE results for 8th grade

Source: prepared by the author, using MINEDUC official data

As with the results for fourth grade, Mountainview obtained results above the national average in all the years presented. In Language, the school exceeded the national average by 33.9 points overall, while in Mathematics, the difference was an average of 24.6 points in favour of Mountainview. The first participation of the school in a national evaluation was in 2000 for 8<sup>th</sup> grade and 2002 for 4<sup>th</sup> grade, obtaining in both cases results below the national average. Since then, SIMCE results at the school have gradually improved, as presented in Figure 3.

SIMCE improvement - 4th grade SIMCE Language → SIMCE Mathematics SIMCE improvement - 8th grade 

Figure 3: Improvement tendency in SIMCE results

Source: prepared by the author, using MINEDUC official data

■■SIMCE Mathematics

In both fourth and eighth grades, certain levels of consistency can be observed (considering the time lapse, which is more than a decade) in the longitudinal trend towards improvement. This is relevant, considering that in the analysis of effectiveness, some schools can present efficiency but only for limited periods of time, with high volatility in the stability of their improvement processes (Valenzuela *et al.*, 2016).

# 7.1.2. General management indicators

→SIMCE Language

Mountainview has also shown remarkable results in the National Performance Assessment System, in which both public and private-subsidized schools are involved. This measures 6 indicators: efficiency, growth, improvement, initiative, equality and integration. According to MINEDUC (2018b), the school has been catalogued consistently as an outstanding school from 2008 to 2017

(last evaluation available). It has obtained the maximum level of the excellency subsidy (100%) granted by this system from 2008 onwards. The general performance of the school from 2008 has exceeded the national average in all the years, as it is shown in Figure 4.

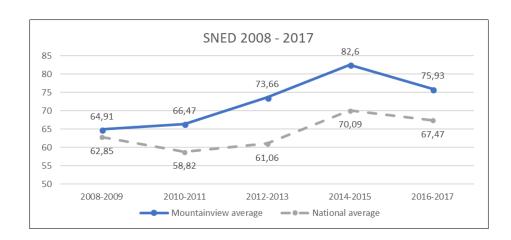


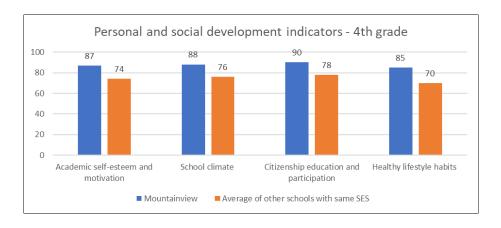
Figure 4: School results in SNED from 2008 to 2017

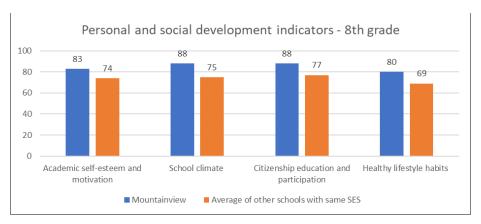
Source: prepared by the author, using MINEDUC (2018b) SNED official databases.

## 7.1.3. Personal students' development indicators

Besides its management and academic results, Mountainview presents also positive outcomes in indicators of students' personal and social development, measured by the Ministry of Education through SIMCE. The results for 2017 are presented in Figure 5.

Figure 5: Personal and social development indicators





Source: prepared by the author, using MINEDUC official data

Given all of these remarkable results, the school has been included in various national studies as a case of success among public schools in Chile. The Chilean Education Quality Agency has also used some internal practices of Mountainview school as examples to implement in other similar public schools among the country, creating videos and tutorials about them (for an example of national research in which this school has been selected as a case of success, see: Bellei *et al.*, 2014).

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