Middle Leadership in Educational Teams: Practices and Effects on the Development of Learning Communities

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Abstract

In a new context of management and teaching action, framed by the organisation of the school into educational teams, middle leaders can play a key role in promoting learning communities, teacher development and improving teaching. Therefore, it seems relevant to understand the practices of these leaders that make their leadership effective. To this end, we adopted a qualitative research paradigm, operationalised through a case study, combining a quantitative and qualitative approach. Thus, we articulated data analysis processes based on descriptive statistics, which we subjected to structural and semantic analysis and interpretation, with a qualitative approach, essentially based on content analysis, to delve into some unique contexts and the perspective of individual actors. After analysing the data, we conclude that educational team coordinators play a fundamental role in facilitating the interpersonal characteristics of learning communities, involving teachers in a more collaborative and collegial working environment. However, their role in facilitating teacher learning is weaker, which hinders their contribution to deepening teacher learning and changing classroom practices.

Keywords

Liderazgo Intermedio en Equipos Educativos: Prácticas y Efectos en el Desarrollo de Comunidades de Aprendizaje

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Resumen

En un nuevo contexto de gestión y actuación del profesorado, enmarcado en la organización de la escuela en equipos educativos, los líderes intermedios pueden desempeñar un papel fundamental en la promoción de las comunidades de aprendizaje, el desarrollo del profesorado y la mejora de la enseñanza. Por ello, parece relevante conocer las prácticas de estos líderes que hacen efectivo su liderazgo. Para ello, adoptamos un paradigma de investigación cualitativo, que instrumentamos a través de un estudio de caso, combinando un enfoque cuantitativo y cualitativo. Así, articulamos procesos de análisis de datos basados en la estadística descriptiva, que sometimos a análisis e interpretación estructural y semántica, con un enfoque cualitativo, basado fundamentalmente en el análisis de contenido, para profundizar en algunos contextos singulares y en la perspectiva de los actores individuales. Tras el análisis de los datos, concluimos que los coordinadores de los equipos educativos desempeñan un papel fundamental a la hora de facilitar las características interpersonales de las comunidades de aprendizaje, implicando al profesorado en un entorno de trabajo más colaborativo y colegiado. Sin embargo, su papel en la promoción del aprendizaje del profesorado es más tenue, lo que está dificultando su contribución al aprendizaje profundo del profesorado, así como al cambio de las prácticas en el aula.

Palabras clave

A
n adequate response to the challenges of the future that promotes quality and equity will require making the school a place of learning, not only by redesigning its workplaces, but also by reorganising structures and redistributing roles, in a metamorphosis that allows overcoming the rigidity, disjointedness and inflexibility that are characteristics of an old grammar school and that have hindered new curricular proposals and teaching practices (Bolivar, 2017; Cabral & Alves, 2016). Significant change requires new conceptions of time, space, rhythm, student groupings and work teams in the context of a more generative grammar (Alves, 2021).

Considering that the transformative energy of the school organisation should come from within and from its actors, and that there are few studies investigating how middle leaders foster peer collaboration and support teachers' learning in Professional Learning Communities (PLCs) (Chen & Zhang, 2022; Harris & Jones, 2017), we intend to explore the power and autonomy of the school and teachers as privileged sources of knowledge and improvement, through the actions of leadership, namely middle leaders, and the constitution of learning communities (Roldão, 2019; Stoll et al., 2017), through the organisation of the school by educational teams (Formosinho & Machado, 2009, 2016a).

Indeed, the greater autonomy of schools in decision making and their increased responsibility for change processes means that these cannot be managed by top leadership alone, but require a distribution of leadership. The greater involvement of middle leaders will, in turn, require research attention on the nature of their roles and their impact on teacher performance (De Nobile, 2018; Leithwood et al. 2019). Furthermore, PLCs are seen as a promising context for teachers' continuous professional development (Vanblaere & Devos, 2018) and there is evidence that leadership is essential for their successful development (Stoll et al., 2006), so it also seems relevant to explore how middle leaders can facilitate the characteristics of PLCs (Chen & Zhang, 2022). However, there are few studies that examine the internal mechanisms of PLCs to support teacher learning from the perspective of middle leaders (Grimm, 2023), i.e. how these leaders facilitate peer collaboration and support teacher learning is still relatively unknown (Chen & Zhang, 2022), although it is an area of growing interest internationally (Forde & Kerrigan, 2023).

Hence the importance of this study, which seeks to identify not only middle leaders' practices in building collegial relationships and facilitating deep and meaningful conversations within educational teams, but also their impact on teacher learning, changes in teaching practice and the promotion of learning communities.

State of the Art

Educational teams as Professional Learning Communities

The concept of organising teaching by educational teams is based on the argument that educational development must be conceived within the school, by a large group of teachers who promote the learning of the same students, according to their characteristics and needs, their context and from a critical perspective. In this sense, the practices of middle management are crucial. In fact, the creation of educational teams is an organisational process aimed at

developing alternative and flexible formulas for the grouping of students and teachers, the management of time, space and the curriculum, in order to provide solutions that make it easier to respond to the difficulties of all students (Formosinho & Machado, 2009, 2016a).

An educational team is made up of teachers of different subjects who are assigned all the students of a given year and who become responsible for the learning of each of them through integrated management of the curriculum, school activities, times, spaces and flexible grouping of students. In this way, teaching becomes a collective task, in collaboration and mutual interdependence, co-constructed in common spaces that allow for the sharing of experiences among teachers, which not only stimulates collaborative work among peers, but also the tasks of coordination and affirmation of middle leadership (Formosinho & Machado, 2009, 2016a). In fact, the management of all the students in a given school year justifies the existence of a new middle management structure, the year coordinator (Formosinho & Machado, 2016b), exercised by the coordinator of each educational team, who, together with the teachers, plans, monitors, evaluates and reorganises the students' learning programmes in order to respond in a timely manner to all the difficulties diagnosed (Alves & Cabral, 2019; Formosinho & Machado, 2016b).

In this way, each educational team functions as a learning community that reorganises the school's organisational structure, creates conditions for collaborative work and aims to promote teacher and student learning and the transformation of teaching practices (Alves et al., 2016; Formosinho & Machado, 2009, 2016b).

Middle Leadership: Practices and Effects

With the resurgence of interest in school effectiveness and improvement, and the recognition of the catalytic effect of leadership in improving student outcomes (Eckert et al., 2023; Grissom et al., 2021; Harris et al., 2019; Leithwood et al., 2008, 2019), research has focused not only on collaboration but also on leadership in school settings, expanding into areas such as distributed and shared leadership, middle leadership, pedagogical and transformational leadership.

Indeed, the distribution and sharing of leadership is essential to face the multiple and intense challenges that arise in an improvement environment. Therefore, the success of a school does not depend on the actions of a single, heroic and charismatic head teacher (Kotter, 2017), but rather on their ability to develop the leadership skills of others to respond in the most collaborative and effective way to the challenges posed by the school context (Meyers & Hambrick, 2019). Recent research findings (Chen & Zhang, 2022; Harris et al., 2019; Vanblaere & Devos, 2018; Zheng et al., 2023) indicate that distributed and shared leadership has a significant impact on teacher leadership and PLCs, which in turn influence individual teachers' self-efficacy. Thus, PLCs are structures whose collaborative culture should be perceived as very important by school leaders, as they can play a key role in exercising their leadership influence by encouraging open and critical discussions on school issues (Zheng et al., 2023).

In this context, middle leaders play a central role in school improvement, as they have great potential to influence practice through formative and pedagogical leadership that focuses on

the development of people (Tintoré, 2022). Pedagogical leadership has been accepted as a central element of school leadership (Hallinger & Wang, 2015) and contributes to learning in three main ways: defining the school's mission and goals, designing academic structures and processes, and developing people (Day, 2019; Gurr, 2019; Hallinger & Wang, 2015; Leithwood et al., 2008, 2019; Stoll et al., 2017). However, transformational leadership has also emerged as a prominent framework, known for its potential to drive positive change and promote organisational growth. Its relevance focuses on its potential to create the necessary mindset among teachers to improve the school, emphasising their motivation and inspiration to increase their level of collective efficacy (Negussie & Hirgo, 2023). According to Robinson et al. (2008), when pedagogical and transformational leadership are used simultaneously, they have a positive impact on school improvement. Thus, in order to ensure deep learning for teachers in learning communities, middle leaders must not only challenge current conceptions of teaching and learning and create habits of inquiry, but also seek to build cultures of trust and sharing (Grimm, 2023).

However, middle leaders' practice can be hampered by various tensions: articulating the demands of teaching and leading; creating common educational horizons and perspectives; respecting personal singularities; and generating collegial dynamics; balancing the competing expectations of senior leaders and teachers (Bennet et al., 2007; Harris et al., 2019). Their actions can also be constrained by the tension between the desire for a collegial approach and the emphasis on performativity, which remains problematic. Their role thus oscillates between being an efficient manager, working with their teams to realise the vision of top leadership, and being an innovative leader, empowering colleagues to make strategic decisions rooted in their values and professional practices (Ainsworth et al., 2022).

From this briefly outlined theoretical framework, we can see that the concept of organising teaching through educational teams follows the argument that educational development, even in response to external mandates, must be conceived as local, locally based, and built from a critical perspective. For this conception of educational development, middle leadership practices and their effects are crucial. Therefore, the research questions for this study are as follows:

- Can the organisation of the school into educational teams contribute to the development of a more participatory middle leadership with professional agency?
- What educational team coordinator practices support PLC development, professional learning, and classroom teaching improvement?
- What challenges do educational team coordinators face in promoting meaningful leadership?

According to Gootenboer (2018), there is no unified and singular notion of best practice in educational institutions, so leaders need to develop and practice their leadership as a form of practice that responds to the needs of the context. Therefore, in order to answer these research questions, we used qualitative research, namely an instrumental case study (Stake, 1995), opting to collect multiple perspectives (principals, educational team coordinators, teachers, students, educational technicians, participant observation), seeking a more analytical and in-depth exploration of the actions of middle leaders, close to practical realities and privileging

the voice of leaders, thus making them active participants in the production of knowledge to support policies and practices (Gootenboer, 2018).

Method

Research Design

The data presented in this article were collected as part of a wider qualitative study of educational teams, conducted as part of a doctoral dissertation in Educational Sciences, and analyses how they are organised, function and self-regulate, and the impact they have on their stakeholders, educational processes and school cultures. In this article, we have narrowed the focus to the development of more participative middle leadership with professional agency in the context of educational teams, highlighting the practices of these middle leaders that support teacher learning and improve classroom teaching.

Context

This case study was carried out in a school cluster in the north of Portugal, serving students from pre-school to the 9th grade. In 2023, the school, described in more detail in Table 1, had 85 teachers and 980 students. Following the Covid-19 pandemic, the school drew up a plan, "Plan 21/23 - More School", to catch up on learning. One of the organisational strategies planned and implemented was to organise the school into educational teams, one for each grade. The teachers' timetable included 90 minutes for a fortnightly educational team meeting so that teachers, in coordination with a leader, could manage the learning of all students in that year and respond to diagnosed problems in a contextualised and timely manner. The 9 coordinators were all experienced (20 to 30 years of teaching experience) and had experience in other leadership positions (department coordinators, project coordinators, class leaders). Their experience as educational team coordinators ranged from one to two years.

Table 1
School Characteristics

Main features	Organizational changes	Signs of a collaborative culture	New middle leadership positions
A 30-year-old school; Located in a rural setting; From pre-school to 9th grade; With a stable number of students (980 in 2023);	The organisation of the teaching by teams of educators, aimed at the success of all the students and their well-being; With an average of 12 teachers	Work in educational teams. Meetings every other week for 90 minutes.	9 Educational Team Coordinators with an average age of 52; With experience in other middle leadership positions; With the exception of one who has been there for 6 years, they

Main features	Organizational changes	Signs of a collaborative culture	New middle leadership positions
With a stable teaching staff (85 teachers in 2023);

Teachers with extensive professional experience, with an average age of 48. | | | have been working at the school for more than 10 years. |

Data Collection, Analysis, and Processing

To gain a deeper insight into the practices of the educational team coordinators and their effects, we chose a qualitative research design, based on a qualitative-quantitative approach. We combined semi-structured interviews with the school principal and educational team coordinators (n=3); with collective interview with the educational technicians and focus groups with teachers (n=6) and students (n=8). Theses interviews and focus groups were conducted via the Zoom platform at a time that was convenient for everyone. The interviews lasted 40 to 60 minutes and the focus groups 60 to 70 minutes, according to table 2.

Table 2
Overview of Qualitative Data Collected - Participants

Data collection methods	n	Minutes	Participants	Age	Years of service at the school
Semi-structured interviews	4	45	Principal (**P**)	59	30
		60	Coordinator 1 (**C1**)	60	5
		45	Coordinator 2 (**C2**)	53	25
		40	Coordinator 3 (**C3**)	51	19
Collective interview	1	35	Educational (**ET1**) Technician	40	3
			Educational (**ET2**) Technician	43	3
Focus Group	2	70	Teacher (**T1**)	42	14
			Teacher (**T2**)	51	2
			Teacher (**T3**)	57	18
			Teacher (**T4**)	50	16
			Teacher (**T5**)	60	13
			Teacher (**T6**)	40	2
		60	Student (**S1**)	14	3
			Student (**S2**)	15	5
			Student (**S3**)	15	5
			Student (**S4**)	15	5
			Student (**S5**)	14	5

Data collection methods	*n*	Minutes	Participants	Age	Years of service at the school
			Student (**S6**)	15	4
			Student (**S7**)	14	5
			Student (**S8**)	15	5

We also observed educational team meetings (n=7) and lessons (n=12), administered a questionnaire to students (n=75) and teachers (n=54), analysed the school's structuring documents, and kept a field diary, taking narrative and reflective notes during or immediately after each activity.

The questionnaires were administered online via a shared link sent by email to each participant. To process these data, we used data analysis procedures based on descriptive statistics, which we subjected to structural and semantic analysis and interpretation.

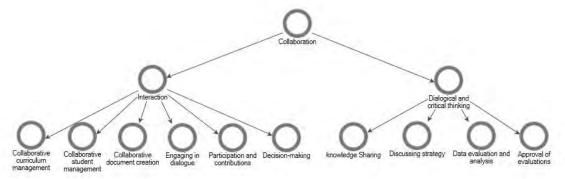All data from the interviews and focus groups were digitally recorded, transcribed and categorised into emerging themes, following the content analysis methodology proposed by Bardin (2013).

Figure 1

Content Analysis: Themes and Categories

NVivo 14 software was used to create analysis matrices, which facilitated the interpretation and triangulation of the data in order to find patterns and relationships between the different themes and participants.

Several measures were taken to ensure the reliability of the study: validation of the participants by returning the transcriptions to them to avoid misinterpretations; triangulation of the data by cross-referencing different participants and methods; prolonged presence in the school, which ensured the observation of repeated interactions and helped us to develop a comprehensive and deep understanding of the functioning of the school; the field diary allowed us to exercise reflexivity by sharing beliefs and biases and explaining how they influenced our interpretation, which contributed to making our qualitative study more precise (Creswell & Creswell Báez, 2021).

Ethical agreements were also made with all participants to ensure that they were informed of the scope and objectives of the study, and that they were given informed consent, the right to withdraw and anonymity.

Findings

Given the importance of middle leadership as an element of teachers' development throughout their careers (Forde & Kerrigan, 2023), and also considering that it is more relevant to examine their role, rather than focusing on leadership models or exceptional attributes and qualities of an individual, to examine practices as activities carried out according to a context that bring about significant changes (Leithwood et al., 2019), we will present the findings of our study, which will be structured in two parts. First, we will look at the practices of year coordinators within education teams, and then we will focus on their impact on PLC development, teacher learning and classroom practice.

Practices of Middle Leaders in the Context of Educational Teams

Of the five leadership practices with an impact on student outcomes: setting goals and expectations; strategically acquiring resources; planning, coordinating and evaluating teaching and the curriculum; facilitating/participating in learning and professional development; and creating an appropriate and supportive context, Robinson et al. (2008) concluded that the fourth was the most important, followed by the third. Therefore, we will structure the data presentation around these two dimensions to demonstrate how middle leaders may or may not develop a sense of agency through curriculum management and promoting collaboration.

People Development

Given that the promotion of collaboration and the creation of a collegial environment (Huijboom et al., 2021) are fundamental to teacher learning, we will first look at the practices of the educational team coordinators that promote this in the grouping studied.

Based on the observations made during the educational team meetings, we noticed that there is always an effort to share the structure of the meeting memorandum beforehand, so that teachers already have some of the most import ant information, which facilitates later reflection and collaboration beyond the meeting. On the other hand, there is also a constant concern on the part of the coordinator to listen to all colleagues on the most complex issues, as two

coordinators (C) said "I try to involve all colleagues in my meetings" (C1); "Everyone is always involved" (C3) and a teacher (T) confirmed

> Also, the coordinators put the memos on the Internet, which are available until the middle of the following week, which allows us to add more information, even for us to take notes, to take the information from these memos, so it is a constant job, it is not a one-off job (T2).

To encourage this collaboration, the coordinators are also keen to encourage the sharing of good practice between colleagues, particularly in cases where students are performing better than expected.

> Whenever a colleague mentions that a student in their subject is behaving more positively or achieving better results, I try to ask the colleague about the pedagogical, assessment and behavioural strategies used with this student that made this positive highlight possible (C1).

According to the teachers, this exchange is very important because

> (...)it has a very positive impact on our professional development because, as I said before, we learn new working strategies, we learn new perspectives that help us to solve situations that we thought were difficult, as well as situations of conflict in the classroom, so I think it is very positive (T1).

This exchange of knowledge and experience, as well as the evaluation of the projects or plans carried out by the team, also seems to allow for collaborative supervision, which, can help teachers to learn from each other and to become more aware of their colleagues' performance in the classroom, as the principal (P) said "But when we work in educational teams, this monitoring (of classroom work) is already done by the collective. So it is a good way for us to develop in terms of teaching and learning" (P), and a teacher commented

> So the first thing the coordinators do is to ask each teacher for his or her opinion about the lesson, about the strategies used, whether they were successful, whether they were appropriate or not. Everyone has their say. It is recorded in the memorandum (T2).

Thus, it seems that the coordinators want to trigger a collective reflection on all the work carried out by their teams.

> So I try to give everyone the opportunity to share good practices in their classes and subjects, to make suggestions for solving certain problems that arise, and to express their opinions on other suggestions that are put forward (C2).

From observing the meetings, we can see that difficulties are shared, solutions are sought, but they are always focused on the students' lack of autonomy, their lack of organisation, their lack of interest and motivation. At no point did we see any reflection leading to an analysis of teaching practices that could justify this attitude on the part of the students. Even when the coordinators are aware that a student's behaviour varies from one subject to another, there seems to be a difficulty in confronting the practices of the colleagues in question by asking

some difficult questions, which ends up limiting the impact of the reflections carried out on both teachers' and students' learning.

> As far as assessment is concerned, there is constant reflection on the data from formative evaluation, we try to understand what is behind the failure of some students, but there is always a tendency to attribute the responsibility to the lack of work and autonomy of the students, to the lack of family support, and we do not confront the teaching practices. Everyone is in their own bubble and it is very difficult to approach them in this way (C2).

It also seems that the director and coordinators try to share the data resulting from either the interim assessment or the final evaluation of the students, but there is a certain difficulty in using it for continuous improvement. On the one hand, evaluation and data analysis seem to be carried out in a superficial and bureaucratic way, in the sense of checking compliance with norms: whether the plans and outlines have been met, whether the defined objectives have been achieved, but without a deep reflection on their implications for the personal, social and academic development of the students. On the other hand, diagnoses are made, but the proposals for remedying problems are not very innovative, and the same difficulties and weaknesses are pointed out again and again.

> Students' results are shared at the end of the assessment periods defined in the school calendar (P1). As the person responsible, I take stock of the results in good time and present them to the team, and we all reflect a little together (C1).
> The meeting began with an update on the Domains of Curricular Autonomy project (a curricular option for interdisciplinary work). Each class leader reported on the work that had already been done as part of this project and the tasks that still needed to be carried out. It was concluded that all the projects were being implemented as planned at the beginning of the school year and were in the process of being finalised. According to the teachers present, the students showed interest and were motivated to participate in the proposed activities (Note from the field diary).
> There should be monitoring and self-evaluation within the team itself. And that is not happening. I do not think there is, is there? We take stock at the end of the year, but that's it. So this is an obstacle of mine, a deficit of mine. I do not reflect on the work of the team because... I am a human being and I do not have time. I do not have time for reflection, I have a lot of things to do... (C1).

There is also an attempt on the part of the coordinators to develop collaborative decision-making processes, which can increase the capacity of members to respond better to more complex situations and trigger collective responsibility in teachers to promote the learning of all students.

> Everyone is always called upon to intervene and give their opinion, and it is always the same, there may be a teacher who disagrees, but I usually ask if it is unanimous or if the majority agrees with what we are going to do next or what we've decided (C3).
> I just wanted to (...) share with you what I've been feeling since I started working in the education team. Up until the time we didn't work in the educational team, I was responsible for the classes I taught. Now I feel responsible for all the 5th grade students, which is the educational team I belong to, because I feel responsible and concerned about whether they are learning, whether they are acquiring the concepts, whether they are not working and should be... I feel responsible for

identifying their difficulties, I feel responsible for helping the students to overcome all their difficulties, and that didn't happen to me before (T1).

In terms of creating a collegial environment, we understand that coordinators are concerned to pay attention to the teachers in their educational teams and to take into account their opinions and suggestions. A coordinator and a teacher commented "Although time is limited, I always try to listen to everyone's opinions and suggestions, and from there I try to build a consensus and respect the majority's way of thinking" (C2); "I think (...) everyone is listened to. The coordinators start with this and we feel that our opinion is taken into account" (T2).

They also try to support and guide the work of teachers, for example by inviting colleagues to share the pedagogical practices they have used with the class and which have produced positive results. One coordinator said "I give (support) when I sense that someone is having difficulties, like difficulties with IT, difficulties in engaging the students, difficulties... when I see a group of students complaining a lot about a particular subject" (C1). Another commented "I am always careful to start by setting an example, by presenting some strategies that I am implementing and that are bearing positive fruit" (C2).

However, at this level we also find that the work of the coordinator is limited in terms of the learning of teachers, especially those who have some weaknesses and are not yet able to identify them or demonstrate the need for this support, which is justified by the fact that some colleagues "are a little afraid to share their failures when they cannot handle a class (…)" (T3). Two coordinators also said

> Unfortunately, this mutual support does and does not exist. Unfortunately, I think it exists among those who do not need it so much, and it does not exist among certain people who would probably benefit immensely from it (C1).
> When there are problems, teachers in difficulty do not have the courage to expose themselves to their colleagues. We should not forget that teacher evaluation requires it... you have to hide your weaknesses and not expose yourself too much. In this sense, it seems to me that there is no coherent, robust trust (C2).

This lack of openness and participation on the part of some team members, which was noted in the observations made, may be justified by the lack of relational trust on the part of these teachers, even though the coordinators were keen to motivate their colleagues emotionally with an attitude of trust, as a coordinator pointed out "And the rest of the intrinsic motivation is through appeal, awareness, spur to action" (C1). A teacher reinforced

> And I think the educational team encourages those moments. These fears disappear because I have this fear, but so does the other person, so we are all there... we are on the same boat and we are here to help each other (T5).

This lack of confidence on the part of some team members may be explained by the lack of empowerment of some of the more vulnerable teachers, concentrating the work on those who are more open to collaboration and change, as the principal pointed out "Consequently, these

more capable teachers become more overburdened with work" (P). Despite the coordinators' desire to motivate everyone to share, reflect and make decisions together, there seems to be some weakness on their part in coming up with creative practical proposals to empower this fringe of teachers who lack confidence and motivation for change.

> But it is always the same people (who do the training and take the jobs)... and the others never do, it is easy for people to withdraw, it is easy for people to become demoralised, it is easy for people to shut themselves off in their own little world... That goes beyond me, it goes beyond me as a teacher and it goes beyond me as a team leader. (C1).

Improving Teaching Programmes

With regard to the practices of educational team coordinators that contribute to the improvement of educational programmes, the strengthening of teaching and learning processes and the facilitation of quality learning experiences for all students, there seems to be a concern on the part of coordinators for collaborative curriculum management through the definition of common objectives to be achieved by the team, as one teacher said "But that's what was said at the beginning, to work for the success of all students, to leave no one behind, at least that's what I remember the coordinators saying from the beginning" (T2), and two coordinators defended

> Yes, there were goals, certainly attitudinal goals. (...) That's where it starts. Objectives to be achieved by the different classes, no doubt. Interdisciplinary objectives in terms of content. Objectives for structuring domains of curricular autonomy, trying to involve everyone, even those we already detect... the students we detect as being a little more resistant. And therefore objectives to overcome, in a way, the difficulties of these students (C1).
> At the beginning of the year, the individual reports of last year's assessment tests were critically read (...). The main weaknesses were diagnosed and the areas and essential learning to be recovered in the different subjects were identified. Therefore, the main objective of the team at this stage was to recover the essential learning in order to be able to think about the essential learning for the ninth grade (C2).

In addition to this concern to define common objectives, the observations made revealed a constant concern on the part of the coordinators to try to define strategies to achieve these objectives and to propose different practices that could be followed by the other teachers. In some of the meetings observed, the coordinators, faced with persistent unsatisfactory results from the students, proposed to avoid conventional lessons and transferable methods and to use more active methods with formative assessment and constant feedback of their results to the students so that they could see how they were progressing in each lesson. They also suggested different approaches, including pair and/or group work so that students can collaborate with each other, and research and exploration of knowledge using computers or mobile phones. They also suggested replacing the traditional assessment test with other assessment tools that would enable students to learn by doing rather than just by rote.

However, verbal cues did not lead to joint work, there were no moments of joint production in meetings where teachers from different disciplines could create materials or small

interdisciplinary projects that would allow more active methodologies to be used, which only happened once per team as part of the Domains of Curricular Autonomy Project, as one teacher said "In my opinion, in the case of the production of teaching materials, this is a part that has been missing" (T3), and one coordinator defended

> Nevertheless, I believe that ... the professional development of teachers, in order to promote a change in teaching practices, needs to be deeper and more consistent, which should include, as I have already mentioned, collaborative supervision, sharing classes, exchanging classes, confronting less suitable practices, experimenting, joint action and implementation, which rarely happens due to a series of organisational constraints, such as lack of time and shared spaces, as well as the barrier of classes and subjects (C2).

One of the reasons given by both coordinators and teachers for the lack of joint production of materials and interdisciplinary planning is the lack of time.

Another function of the educational teams, led by the respective coordinator, is the monitoring of the students' progress. In fact, from the observations made and the analysis of the memoranda, we noticed that the first item on the agenda of all the meetings is to report on the formative assessment and to reflect on the students who have shown the most difficulties, making an individual analysis of their progress in the different subjects, both in terms of attitudes and learning.

We found that there is a concern to develop recovery plans, but that their impact ends up being somewhat limited because they focus on the same teaching strategies, and it seems to be difficult for teachers to become authors, to detach themselves from the programmes in order to make a more flexible adaptation of essential learning to the profile of the students in question, as the following note from our field diary makes clear.

> A general presentation of the document (recovery plan) was made, but the coordinator asked the natural sciences, geography and history colleagues to review the essential learning they had included, since it wasn't a question of covering all the essential learning for the school year, but rather the learning that would enable the students to complete their compulsory education according to their learning profile (Field diary note).

As far as the management of the students' learning is concerned, we think it is important to highlight the multidisciplinary work with the school's social mediation team, since the educational technician (ET), educators and mediators, also take part in these educational team meetings and work in partnership with the teachers on more transversal learning recovery strategies and in the field of non-formal education, through mentoring and social tutoring programmes, as they themselves have stated "I think (...) we do a lot of work on learning problem solving. Helping students to self-regulate, to be aware of what has happened, to understand how else they could have been in this or that situation..." (ET1).

It is also worth highlighting the existence of flexible groups of students, managed by the 7th and 9th grade educational teams, according to their learning profile. It seems to us that this could be another measure to support differentiated and transversal learning, with advantages

for students' learning, as it makes it easier to adapt differentiated strategies to a more homogeneous group of students.

> In the 7th and 9th grades, the "Class Plus" is applied, since it is the year in which the cycle begins and the year of the final exams. (...) In the case of the 9th grade educational team, in the subjects of Portuguese, Mathematics, Physics and Chemistry, Natural Sciences and English, groups of students with a more homogeneous learning profile are formed, who attend "Class Plus" for five to six weeks, which allows the teachers to work more adapted to this specific group of students (C2).
> So I think the main advantage is that the teacher adapts to the profile of the students. That's good, that's an added value of "Class Plus" (T2).

According to the students (S), "I think that the biggest project that happened (...), in these five years, was (…) the Class Plus (...)" (S2); "I also agree, I think that Class Plus was one of the best things that happened during the whole school year" (S8).

Impact of Middle leaders' Practices in the Context of Educational Teams

From the survey carried out with the teachers of the school (n=54) and according to Table 3, we can see that the majority of the teachers seem to have a very positive perception of the practices of the coordinators of the educational teams. More than 85% of the teachers think that the coordinators help to clarify the common objectives to be achieved by the team, as well as any doubts that may arise; that they take into account the suggestions made; that they provide moments for reflection; that they favour collective decision-making; that they know how to manage, integrate and value the different positions and perspectives of the group; and that they openly share information and knowledge.

Table 3

Teachers' Perceived Practices of Educational Team Coordinators (n=54)

About the educational teams coordinators	Sporadically (Never/ Rarely)	Occasionally (Sometimes)	Regularly (Often/ Almost always)	Not applicable
He/she helps to clarify the common goals to be achieved by the team.		11%	87%	2%
He/she provides moments of co-creation as a team.	2%	18%	76%	4%
He/she helps to clarify any doubts that may arise.		13%	85%	2%
He/she takes into account the suggestions that are made.		11%	87%	2%
He/she provides moments for reflection.	4%	4%	88%	4%
He/she favours collective decision-making.		7%	91%	2%
He/she encourages team members to share suggestions and ideas.	4%	11%	83%	2%
He/she has difficulty listening to the difficulties presented.	78%	5%	15%	2%
He/ she knows how to manage, integrate and value the different positions and perspectives of the group.		11%	87%	2%
He/ she shares information and knowledge openly.	2%	5%	91%	2%
He/ she asserts his/her perspectives.	67%	15%	13%	5%

These practices may not only promote collaboration between teachers, but also create a collegial environment that may justify the feelings that most teachers have about working in educational teams. According to Table 4, more than 80% of teachers feel that they have someone to talk to when they have difficulties; that they can trust their colleagues when they face a problem or challenge; that they are more open to receiving feedback on their practice from their colleagues, as well as being able to change their perspectives; that their suggestions are taken into account; and that there is a common purpose towards collective quality performance. Thus, there seems to be a predisposition towards collaboration on the part of most teachers, although, as the coordinators pointed out, it is not yet universal, as we still see a small fraction of teachers who do not believe that colleagues build relationships of mutual trust and friendship, who find it difficult to approach colleagues and who are disappointed by them. However, according to the team coordinators, these attitudes may slow down change a little, but they do not prevent a good working environment.

A good working environment is also a facilitating factor. Note that just because there are people who are very attached to their own habits and practices does not mean they create a bad working environment! There are good working environments that allow sharing (C1).

Fortunately, there are only a few of them, but they continue to hold back progress and do not fit into this equation of mutual support, because they are neither willing to give it nor count on it (C2).

Table 4

Perceived Feelings of Teachers Working in an Educational Team (n=54)

Working in educational teams, I feel that…	Disagreement (Completely Disagree and Disagree)	Agreement (Agree and Completely Agree)	I neither agree nor disagree
I have someone to talk to when I have difficulties.	7%	87%	6%
I can trust my colleagues when faced with a problem or challenge.	4%	87%	9%
I am more comfortable sharing my experiences.	11%	80%	9%
I am more open to receiving feedback from colleagues on my practice.	6%	85%	9%
I am more open to changing my opinions/perspectives.	4%	85%	11%
My suggestions are taken into account.	6%	87%	7%
I am desappointed in my colleagues.	83%	9%	8%
I find it difficult to approach my colleagues.	91%	6%	3%
My colleagues give me positive feedback on my performance.	13%	59%	28%
There is a common goal for high quality collective performance.	2%	93%	5%
There are human connections: colleagues build relationships of mutual trust and friendship.	17%	74%	9%
I am just doing my job.	67%	26%	7%
I am developing professionally.	13%	80%	7%
I feel more fulfilled.	30%	57%	13%

This willingness to collaborate, in the context of a good working environment to which the way in which the coordinators have managed the dynamics of the work of the educational teams has contributed, may also explain the positive perception of the majority of teachers who, according to Table 5, consider that the work of the educational teams has enabled them to get to know all the students in a given year and has thus promoted the sharing of responsibilities; self-reflection and self-evaluation, as well as openness to other perspectives; professional

interaction with a positive impact on teaching practice and, therefore, opportunities for professional development.

Table 5

Teachers' Perceptions of the Dynamics of the Work of Educational Teams (n=54)

Collaborative work in educational teams…	Disagreement (Completely Disagree and Disagree)	Agreement (Agree and Completely Agree)	I neither agree nor disagree
It contributes to the academic sucess of all students.	15%	76%	9%
It leads to some teachers benefiting from the work of others.	76%	20%	4%
It is an effective way of supporting colleagues who are struggling.	11%	78%	11%
It contributes to our openness to different perspectives.	4%	92%	4%
It creates opportunities for teachers' professional development.	6%	85%	9%
It contributes to professional interaction with a positive impact on teaching practice.	4%	92%	4%
It contributes to self-reflection and self-evaluation.	4%	94%	2%
It increases the ability to respond to new challenges.	7%	85%	8%
It is a drain on our time to do other tasks.	61%	28%	11%
It encourages innovative and more effective teaching practices.	9%	78%	13%
It encourages agents of change.	13%	78%	9%
It allows you to get to know all the students in a given year.	15%	81%	4%
It promotes shared responsibility.	9%	87%	4%
It is a waste of time.	78%	7%	15%
It contributes to professional wellbeing.	26%	65%	9%

When observing the lessons (n=12), we counted the number of times the set of teaching practices listed in Table 6 appeared in each of the lessons observed. By calculating the average frequency of each of these methodological strategies, we can see that there have been no significant changes in teaching practices. The transmittable methodologies remain the most

frequently used, centred on teachers presenting content, albeit with interaction with students and through educational and interactive platforms; as well as the training methodology based on solving exercises from the textbook and activity book, and sometimes digital exercises. On the other hand, the use of methods of exploration, research and socialisation through group work, project work and experimental work is very rare and was barely noticeable in the classes observed.

Table 6
Frequency of Teaching Practices on the Basis of Lesson Observations (n=12)

Frequency Pedagogical Practices	N	Minimum	Maximum	Average	Standard deviation
Use of new tecnologies	12	0.00	3.00	1.41	1.24
Displaying content from the manual	12	0.00	3.00	0.83	1.26
Presenting content from PPT or interactive platforms	12	0.00	3.00	1.16	1.46
Presenting content based on interaction with students	12	0.00	3.00	2.50	1.16
Solving exercises from worksheets/ activity books	12	0.00	3.00	1.66	1.30
Solving exercises using interactive platforms	12	0.00	2.00	0.16	0.57
Systematisation of content in concept maps/ schemes	12	0.00	3.00	0.91	1.24
Individual work	12	0.00	3.00	1.33	1.43
Working in pairs	12	0.00	3.00	1.08	1.31
Group work	12	0.00	0.00	0.00	0.00
Video/film presentations	12	0.00	3.00	0.58	1.16
Oral presentations of students' work	12	0.00	3.00	0.25	0.86
Analysing and discussing situations/ problems/ observations or experiences	12	0.00	3.00	0.25	0.86
Recording conclusions/ solutions/ possibilities	12	0.00	3.00	0.50	1.16

Thus, although there seems to be a good working environment and a willingness to collaborate among most of the teachers working in educational teams, their learning has not been profound because it has not implied a change in teaching practices, which we will try to explain in the following discussion of the results.

Discussion

We will present a discussion of the above findings by answering our research questions. In the first part, we will answer the question: Can the organisation of the school into educational teams contribute to the development of a more participatory middle leadership with professional agency? In a second part, we will deepen the content presented by answering the other two research questions: What educational team coordinator practices support PLC development, professional learning, and classroom teaching improvement; What challenges do educational team coordinators face in promoting meaningful leadership?

Can the Organisation of the School into Educational Teams Contribute to the Development of a More Participatory Middle Leadership with Professional Agency?

The results presented above show, in line with other studies (Chen & Zhang, 2022; Leithwood et al., 2008), that team coordinators play an important role in facilitating collaboration among teachers and have a strong and positive influence on staff motivation, commitment and beliefs in supporting their working conditions, but they make a less relevant contribution to their deeper professional learning, as Grimm (2023) had already concluded. In this way, these middle leaders demonstrate a greater capacity for intervention, but their professional agency is not fully promoted within the educational teams because they do not achieve significant changes in teaching practices. This weakness in their positive capacity for change is due to a lack of focus on instructional practices, either through observation and, consequently, the promotion of constructive feedback, or through the confrontation of weaker practices and the demonstration of exemplary practices, as we will be able to explain in more detail below through the answers to the remaining research questions. It should also be noted that this difficulty cannot be dissociated from professional practices that are characterised by considerable relative autonomy, individualism, and teaching work that is still very much characterised by images of the "secret garden" (Wilson, 1989) that is still the classroom.

What Educational Team Coordinator Practices Support PLC Development, Professional Learning, and Classroom Teaching Improvement; What Challenges do They Face in Promoting Meaningful Leadership?

According to the data presented, we found that coordinators adhered to five of the seven practices presented by Stoll et al. (2017) as fundamental for change and improvement within PLCs: starting with an end in mind, knowing what is being measured, planning clear actions, sharing ownership and providing opportunities for reflection. However, we identified some limitations to these practices that prevent more consistent collaboration that can support deep teacher learning and, consequently, change in classroom practice.

Thus, coordinators and teachers seem to have common goals in mind and all their work is focused on benefiting students in terms of their learning, one of the dimensions of effective PLC (Huidjibom et al., 2021). We also note a concern to find out what is being measured and to collect data that will allow progress to be monitored. However, it seems to us that the reading of this data sometimes satisfies a bureaucratic obligation to present results, in a performativity

approach, rather than the desire to adopt a collegial approach of creation and authorship. This tension limits the effectiveness of middle leaders' actions (Ainsworth et al., 2022).

There is also an attempt to plan clear actions, as the coordinators make suggestions for the implementation of recovery strategies, encourage the creation of recovery plans and guide teachers in their implementation, based on joint reflection and decision making, including multidisciplinary coordination with educational technicians, based on informal conversations in which they try to exchange and understand good practices. However, despite the fact that the educational team is made up of teachers from different subject areas, there have been almost no interdisciplinary projects that could break down the barriers between subjects and between classrooms, facilitating a more comprehensive and integrated approach to learning, which could benefit not only students' learning but also that of teachers (Tintoré, 2021). It seems to us, therefore, that there is, on the one hand, little recognition of research evidence that could support more appropriate interventions and, on the other hand, weak monitoring of the implementation of the plans that have been put in place. In line with Leithwood's (2016) conclusions on the performance of departmental coordinators, it seems that educational team coordinators also find the activity of evaluating and reviewing the work of the teachers in their team embarrassing, avoiding the confrontation of some of the practices implemented as well as the difficult questions, and concentrating their efforts only on verifying the fulfilment of previously defined plans. This approach can also limit teachers' in-depth learning, which, on the contrary, implies the desire and courage to reflect and examine in order to improve practices. However, egalitarian and autonomous standards, high work pressure on teachers and the risk of abandonment or resistance make leadership for deep learning very complex (Grimm, 2023).

There also seems to be a sense of shared responsibility in the educational teams, i.e. collaboration between coordinators and teachers, facilitated by the fact that they share the same experience, which ultimately promotes a positive dialogue of support and guidance, which in turn helps to create a culture of trust. However, we found that although there is a good working environment in the educational teams and many teachers feel confident working in these teams, there are still teachers who seem to lack integration and confidence. This lack of trust can be explained by a diversity of views on the profession, a lack of confrontation with some practices and a lack of reliability, i.e. a failure to fulfil what has been agreed (Tschannen-Moran, 2019).

Providing opportunities for reflection is another practice we emphasise in educational teams. However, reflection with peers in a community of teachers who share and trust each other does not automatically mean deep learning and improved teaching. For this to happen, the evaluation of all work dynamics needs to be deepened, in particular to understand objectively the impact of the practices carried out on student learning and progress, which requires informed middle leaders who consciously and systematically analyse and support teachers' learning processes and promote research habits among their peers (Grimm, 2023). In this sense, there seems to be an urgent need to develop middle leaders as researchers who are able to support the systematic collection and analysis of data on teaching and learning, and as theorists who are able to identify the meaning of the data and use this insight to inform and implement changes for improvement (Forde & Kerrigan, 2023; Stoll et al., 2017).

Conclusion

In a new context of management and teaching action, framed by the organisation of the school by educational teams, we find that their coordinators play a key role in facilitating the interpersonal characteristics of these learning communities, involving teachers in a more collaborative and collegial working environment, where they find not only support and guidance, but also a space for sharing experiences and a more reflective dialogue, thus feeling collectively responsible for the learning of all students. We can therefore conclude that these coordinators, as middle leaders, have the potential to sustain productive PLCs in the school context. However, their role in supporting teacher learning is more tenuous because these leaders find it difficult to combine a culture of trusting and shared learning with challenging perspectives and a research habit, which hinders their contribution to teachers' deeper learning as well as to changing classroom practices. And, as we have seen, these practices are very much driven by individual interests, perceptions, and desires.

Thus, we aimed for our research to have implications for policymakers, school leaders and teachers, because by showing that effective middle leadership can have a decisive impact on the promotion of PLCs, teacher learning and the improvement of teaching, we also highlighted the care that should be taken in selecting, training and supporting them. Therefore, we have demonstrated the need to transform middle leaders into researchers capable of driving substantial changes in teaching, which implies a third place of training (Nóvoa, 2022) where the explicit knowledge of the professional meets external theory, thus highlighting the importance of researchers/facilitators in empowering these leaders. By continuing to contribute to the enrichment of knowledge about the action of educational team coordinators, and by identifying different constraints that limit the effectiveness of their work, we aim to point out different courses of action for both leaders and teachers.

However, we suggest that future work could explore middle leadership practices in the context of collaborative dynamics in educational teams, in a larger number of schools, to understand the extent to which the findings of this research, which is limited to one specific case, can be extended to similar contexts.

References

Ainsworth, S., Costa, M. da, Davies, C., & Hammersley-Fletcher, L. (2022). New perspectives on middle leadership in schools in England - Persistent tensions and emerging possibilities. *Educational Management Administration & Leadership*, *0* (0). https://doi.org/10.1177/17411432221086847

Alves, J. M. (2021). Uma gramática generativa e transformacional para gerar outra escola. In C. Palmeirão, & J. M. Alves (Coord.), *Mudança em movimento: Escolas em tempo de incerteza* (pp.25-48). Universidade Católica Editora.

Alves, J. M., & Cabral, I. (2019). Texto de enquadramento e reflexão acerca do estudo sobre escolas, lideranças e ensino. In M.C. Roldão (Coord.), *Quem lidera o Ensino e a aprendizagem nas escolas? Um estudo de caso múltiplo sobre lideranças pedagógicas* (pp.13-34). Fundação Manuel Leão.

Alves, J. M., Formosinho, J., & Verdasca, J. (2016). Os caminhos do resgate: A importância de novas modalidades de organização pedagógica da escola. In J. Formosinho, J.M. Alves, & J. Verdasca (Org.), *Uma nova organização pedagógica da escola: Caminhos de possibilidades* (pp.13-18). Fundação Manuel Leão.

Bardin, L. (2013). *Análise de Conteúdo* (2ª ed.). Edições 70.

Bennett, N., Woods, P., Wise, C., & Newton, W. (2007). Understandings of middle leadership in secondary schools: A review of empirical research. *School Leadership & Management*, *27*(5), 453–470. https://doi.org/10.1080/13632430701606137

Bolivar, A. (2017). Lideranças pedagógicas e transformacionais: Princípios, práticas e possibilidades. In I. Cabral, & J. M. Alves (Orgs), *Da construção do sucesso escolar: Uma visão integrada* (pp. 47-68). Fundação Manuel Leão.

Cabral, I., & Alves, J. M. (2016). Condições políticas, organizacionais e profissionais da promoção do sucesso escolar: Ensaio de síntese. In J. Formosinho, J. M. Alves, & J. Verdasca (Orgs.), *Uma nova organização pedagógica da escola: Caminhos de possibilidades* (pp. 167-179). Fundação Manuel Leão.

Chen, L., & Zhang, J. (2022). Exploring the role and practice of teacher leaders in professional learning communities in China: A case study of Shanghai secondary school. *Educational Studies*. https://doi.org/10.1080/03055698.2022.2026297

Creswell, J.W., & Creswell Báez, J. (2021). *30 Essential skills for the qualitative researcher* (2nd ed.). Sage Publications.

Day, C. (2019). Leadership in challenging schools: The importance of resilience. In J. Weinstein, & G. Muñoz (Eds.), *Liderazgo en escuelas de alta complejidad sociocultural: Diez miradas* (pp.245-269). Ediciones Universidad Diego Portales.

De Nobile, J. (2018, December 2-6). *The state of the art of research into middle leadership in schools*. [Paper presentation] Annual International Conference of the Australian Association of Research in Education, Sydney, Australia.

Eckert, J., Morgan, G., & Daughtrey, A. (2023). Collective school leadership and collective teacher efficacy through turbulence. *Leadership and Policy in Schools*. https://doi.org/10.1080/15700763.2023.2239894

Forde, C., & Kerrigan, K. (2023). Middle leaders in the schools. In I. Menter (Ed.), *The palgrave handbook of teacher education research* (pp. 644-686). Palgrave Macmillan.

Formosinho, J., & Machado, J. (2009). *Equipas Educativas: Para uma nova organização da escola*. Porto Editora.

Formosinho, J., & Machado, J. (2016a). Tipos de organização dos alunos na escola pública. In J. Formosinho, J. M. Alves, & J. Verdasca (Orgs.), *Uma nova organização pedagógica da escola: Caminhos de possibilidades* (pp.19- 38). Fundação Manuel Leão.

Formosinho, J., & Machado, J. (2016b). Diversidade discente e equipas educativas. In J. Formosinho, J. M. Alves, & J. Verdasca (Orgs.), *Uma nova organização pedagógica da escola: Caminhos de possibilidades* (pp.39- 69). Fundação Manuel Leão.

Gootenboer, P. (2018). *The practices of school middle leadership*. Springer.

Grimm, F. (2023). Teacher leadership for teaching improvement in professional learning communities. *Professional Development in Education*. https://doi.org/10.1080/19415257.2023.2264286

Grissom, J., Egalite, A., & Lindsay, C. (2021). *How principals affect students and schools: A systematic synthesis of two decades of research*. The Wallace. http://www.wallacefoundation.org/principalsynthesis

Gurr, D. (2019). Panorama del liderazgo en escuelas de alta complejidad socioeducativa. In J. Weinstein, & G. Muñoz (Eds.), *Liderazgo en escuelas de alta complejidad sociocultural: Diez miradas* (pp. 19 -70). Ediciones Universidad Diego Portales.

Hallinger, P., & Wang, W. (2015). *Assessing instructional leadership with the principal instructional management*. Springer International Publishing. DOI:10.1007/978-3-319-15533-3

Harris, A., & Jones, M. (2017). Middle leaders matter: Reflections, recognition, and renaissance. *School Leadership & Management*, *37* (3), 213-216. https://doi.org/10.1080/13632434.2017.1323398

Harris, A., Jones, M., Ismail, N., & Nguyen, D. (2019). Middle leaders and middle leadership in schools: Exploring the knowledge base (2003-2017). *School Leadership & Management, 39* (3-4), 255-277. https://doi.org/10.1080/13632434.2019.1578738

Huijboom, F., van Meeuwen, P., Rusman, E., & Vermeulen, M. (2021). Professional learning communities (PLCs) as learning environments for teachers: An in-depth examination of the development of seven PLCs and influencing factors. *Learning, Culture and Social Interaction*, 31, 1- 14. https://doi.org/10.1016/j.lcsi.2021.100566

Kotter, J. (2017). *Liderando mudanças: Transformando empresas com a força das emoções*. Alta books Editora.

Leithwood, K. (2016). Department-Head leadership for school improvement. *Leadership and Policy in Schools*, *15* (2), 117-140. https://doi.org/10.1080/15700763.2015.1044538

Leithwood, K., Harris, A. & Hopkins, D. (2019). Seven strong claims about successful school leadership revisited. *School Leadership and Management*, *40* (1), 5-22. https://doi.org/10.1080/13632434.2019.15960077

Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership revisited. *School Leadership and Management*, *28* (1), 27-42. https://doi.org/10.1080/13632430701800060

Meyers, C., & Hambrick, D. (2019). Claves para el liderazgo en contextos escolares de menor desempeño. In J. Weinstein, & G. Muñoz (Eds.), *Liderazgo en escuelas de alta complejidad sociocultural: Diez miradas* (71 - 110). Ediciones Universidad Diego Portales.

Negussie, D., & Hirgo, J. (2023). Impact of transformational leadership on the achievement of objectives in the implementation of new educational policies: A literature review. *International Journal of Advanced Research in Science, Communication and Technology* (IJARSCT), *3* (1), 466 - 472. DOI:10.48175/IJARSCT-12982

Nóvoa, A. (2022). Conhecimento profissional docente e formação dos professores. *Revista Brasileira de Educação*, 27 e270129. https://doi.org/10.1590/S1413-24782022270129

Robinson, V., Lloyd, C. & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, *44*(5), 635-674. https://doi.org/10.1177/0013161X08321509

Roldão, M.C. (2019). *Quem lidera o ensino e a aprendizagem nas escolas? Um estudo de caso múltiplo sobre liderança pedagógica*. Fundação Manuel Leão.

Stake, R. (1995). *The art of case study research*. Sage Publications.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, *7*(4), 221-258. https://doi.org/10.1007/s10833-006-0001-8

Stoll, L., Brown, C., Spence-Thomas, K., & Taylor, C. (2017). Teacher leadership within and across professional learning communities. In A. Harris, M. Jones, & J. Huffman, *Teachers leading educational reform: The power of professional learning communities* (pp. 51-71). Routledge.

Tintoré, M. (2021). *Els líders ecucatins i la transformació curricular. Cap a un currículum més obert.* FORUM, 56.

Tintoré, M. (2022). Preparando el futuro: Los nuevos retos del liderazgo para el aprendizage. In C. Palmeirão, & J. M. Alves (Coords.), *Escolas a construir futuro* (pp. 19-33). Universidade Católica Editora.

Tschannen-Moran, M. (2019). Cultivating trust in the face of adversity. In J. Weinstein, & G. Muñoz (Eds.), *Liderazgo en escuelas de alta complejidad sociocultural: Diez miradas* (pp.192-221). Ediciones Universidad Diego Portales.

Vanblaere, B., & Devos, G. (2018). The role of departmental leadership for professional learning communities. *Educational Administration Quarterly*, *54* (1), 85-114. https://doi.org/10.1177/0013161X17718023

Wilson, S. M., & National Center for Research on Teacher Education, East Lansing, MI. (1989). The Secret Garden of Teacher Education. Craft Paper 89-2 [microform] / Suzanne M. Wilson. [Washington, D.C.], ERIC Clearinghouse. https://eric.ed.gov/?id=ED320853

Zheng, X., Jiang, C., & Liu, C. (2023). Uncovering the complex relationships among distributed leadership, departmental teacher leadership, and professional learning community in Chinese schools. *Future in Education Research,* 1-16. https://doi.org/10.1002/fer3.15