

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

Educational Empowerment and Strategic Guidance: A Critical Perspective on Regional Educational Digital Transformation

Linda Castañeda

<https://orcid.org/0000-0002-1055-9241> Universidad de Murcia

Virginia Viñoles-Cosentino

<https://orcid.org/0000-0002-9048-5827> Universitat Jaume I

Ana Yara Postigo-Fuentes

<https://orcid.org/0000-0001-7965-1911> Institut für Romanistik, Heinrich Heine Universität

Cesar Herrero-Ramila

<https://orcid.org/0000-0001-6208-6055> European Commission - JRC (Joint Research Centre)

Romina Cachia

<https://orcid.org/0000-0002-9773-6924> European Commission – JRC (Joint Research Centre)

Abstract

This article explores the dichotomy between empowerment- and guidance-oriented strategies in the leadership exercised over teachers, particularly within national digital-transformation initiatives and the teacher-professional-development schemes designed to sustain them. Building on European Commission frameworks and tools (SELFIE, DigComp, DigCompEdu, DigCompOrg), we conducted 16 semi-structured interviews with the officials formally responsible for digital-education strategy in each of Spain's 15 Autonomous Communities and the INTEF-governed enclave. Deductive coding of 17 leadership traits reveals a spectrum of territorial approaches: eight jurisdictions privilege guidance-focused leadership, seven adopt mixed models that blend central direction with pockets of school autonomy, and one prioritises empowerment, redistributing decision-making and nurturing communities of practice. These patterns suggest that system size, technical capacity and political alignment shape whether a region emphasises oversight, autonomy or a negotiated midway position. We argue that successful digital transformation requires a context-sensitive mix of structured support and professional agency, enabling teachers both to follow clear trajectories and to act as active agents of change. By foregrounding leadership logics rather than individual personalities, the study contributes a transferable analytical framework for comparing territorial strategies across decentralised educational systems.

Keywords

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

Educational Digital transformation; Educational policies; Teacher Professional Development; Critical perspective; Leadership styles

Introduction

Policy development and enactment are far from mere technical or standardised procedures. They are intricate processes assembled in unique ways, tailored to specific contexts, locations and objectives (Ball, 2016). Global, national and regional strategies are not simply hierarchical levels of adoption; they configure interdependent scenarios of development in which decisions impact every actor involved, and at the same time, reshape the way different phenomena, such as digital transformation, impact on society (Reis and Melão, 2023).

Digital adoption is pervasive in almost all contexts pursuing educational transformation, and the digitalisation of educational institutions became a priority for national and supranational regulations and initiatives (Cobo and Rivas, 2023; European Commission, 2023; European Union, 2019). In recent years, there has been a noticeable surge in frameworks, tools, regulations, and investment initiatives designed to enhance infrastructure, improve digital competences, and seamlessly integrate Educational Technologies into everyday educational practices. These advancements are spreading across diverse territories through various channels, supported by a range of political endorsements (Delgado et al., 2015; Lestari and Subriadi, 2021).

Political decisions regarding education, particularly, those regarding digital transformation have a direct impact on essential institutional educational aspects (Ball, 2003). How governments channel these changes to schools through governance strategies and policies is a key driver of what some authors named as *pedagogical frailty* (Kinchin and Winstone, 2017): a fragile alignment of learning aims, teaching practices, and feedback loops that can splinter under external pressure. Such strategies span a continuum from tightly guided, top-down directives that seek uniform and efficient policy enactment to more open, empowerment-oriented approaches that entrust schools and teachers with greater agency.

Guidance-oriented leadership emphasises central direction, formal power and efficiency (Helmold 2020; OECD 2012). Conversely, empowerment-oriented leadership redistributes decision-making, nurtures professional agency and relies on collaborative communities of practice (Robbins 2016; Banutu-Gomez 2015; Tomassini et al. 2011). Framing territorial strategies through this dual lens allows a critical reading of digital transformation: it highlights *who* drives change, *how* responsibility is shared and *which* forms of agency are enabled or constrained. Accordingly, it is essential to critically analyse the decisions associated with this transformation (Castro Benavides et al., 2020; McCarthy et al., 2022), as they are a fundamental part of the digital transformation process of education.

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

This article maps the leadership strategies reported by territorial authorities during Spain's digital-education push and highlights the diversity of pathways stakeholders themselves describe. The research framing this study has analysed how different territories in Spain have implemented their educational digital transformation plans and whether they have used the educational tools (e.g. SELFIE and SELFIEforTEACHERS) and conceptual frameworks (e.g. DigComp, DigCompOrg and DigCompEdu) provided by the European Commission (Castañeda et al., 2023). Within the scope of this general approach, this study focuses on understanding the impact of a predefined objective can have on the strategic decisions made by each territory and how these decisions translate to a guiding strategy or an empowerment strategy for the participants. The goal is to comprehend the territorial operationalization process of the digital transformation of education, considering the complexity of each territory, especially its historical, political, or contextual conditions. This complexity influences the choice of strategy, highlighting how each region's unique circumstances force a particular approach, consolidating a variety of approaches towards digital transformation of education as a general idea.

Exploring leadership styles in the context of educational digitalisation is crucial because leadership practices fundamentally shape how innovation is framed, communicated, and implemented across educational systems. As the digital transformation of education becomes a key policy priority across Europe and globally, understanding how subnational actors interpret and enact leadership offers valuable insight into the diversity and complexity of real-world implementation processes.

This study contributes to the field of educational leadership by providing empirical evidence on how digitalisation strategies are constructed and led across multiple governance levels. Although the focus is on Spain, its decentralised structure and strong alignment with European policy instruments make it a compelling case for international comparison. The findings presented here offer a lens through which other countries or regions can examine their own leadership practices in relation to digital transformation—particularly in contexts where centralised guidance coexists with regional autonomy.

1. Research Context: Strategical Approaches of Educational Digital Transformation in Europe

The integration of technology into education has been a longstanding institutional goal, representing a shift from a desirable horizon to a tangible reality, particularly accentuated by the COVID-19 pandemic (Bozkurt et al., 2020; Caena, 2014; Hodges et al., 2020). This rapid transition has prompted a broader understanding of digital competence and digital teaching competence, beyond mere tool usage (Marín and Castañeda, 2023). There is a growing recognition that the impact of technology in education extends far beyond the adoption of specific tools in the classroom. Instead, it encompasses a more situated, contextual, emancipatory, and critical perspective

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

(Avello-Martínez and Marín, 2016; Cetindamar Kozanoglu and Abedin, 2020; European Union, 2018).

Similarly, the approach to technological change in education has evolved. Previously, it was often perceived as a managerial task focused on providing devices and connectivity for teachers to implement technology. However, it has now transformed into a systemic, multi-level process, recognizing educational systems and schools as complex entities requiring coordinated efforts across various levels to achieve genuine transformation (Esteve-Mon et al., 2023).

Within this context of understanding, the European Commission (EC) has developed several frameworks that define with clarity some of the most relevant aspects and processes related to the digital transformation of education. In particular for digital transformation, the following frameworks have been developed: the Digital Competence Framework for Citizens ([DigComp](#)), the Digitally Competent Educational Organisation Framework ([DigCompOrg](#)), and the Digital Competence Framework for Educators ([DigCompEdu](#)). Additionally, EC has developed hands on tools to reflect about some of those competences, concretely, [SELFIE](#) -as a tool for self-diagnosis of the Digital Capacity of an educational organization–, and [SELFIEforTEACHERS](#), for the self-reflection of the digital competence of educators. Under Article 165 of the Treaty on the Functioning of the European Union, the EU holds a supportive—rather than legislative—competence in education. Accordingly, DigComp, DigCompEdu, DigCompOrg and the SELFIE tools are non-binding reference frameworks. Their uptake is encouraged through soft-law instruments (e.g., Council Recommendations 2018, 2023) and through financial conditionality in programmes such as Erasmus+ and the Recovery and Resilience Facility (RRF)¹.

Spain, by its part, follows a shared-competence model. Under Article 149 of the Spanish Constitution and Organic Law 2/2006 on Education (as amended by LOMLOE 3/2020), the Ministry of Education, Vocational Training and Sports (MEFPD) sets the national core curriculum, minimum teaching requirements and system-wide evaluation, and it represents Spain in EU negotiations. The 17 Autonomous Communities legislate and implement the remaining curriculum, infrastructure, and teacher-development policies—including digitalisation—within their territories². Through its technical arm, INTEF (The National Institute for Educational Technology and Teacher Training), the MEFPD also governs the enclaves of Ceuta, Melilla and Spanish overseas schools. Although EU frameworks and tools such as DigComp and SELFIE are non-binding, the

¹ Article 165 TFEU; Council Recommendation of 22 May 2018 on key competences [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)) ; Council Recommendation of 23 Nov 2023 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202401115 on digital education enabling factors.

² Art. 149 & 150 Spanish Constitution <https://app.congreso.es/consti/constitucion/indice/titulos/articulos.jsp?ini=149&tipo=2> ; Organic Law 2/2006 <https://www.boe.es/buscar/pdf/2006/BOE-A-2006-7899-consolidado.pdf> ; LOMLOE 3/2020 <https://www.boe.es/buscar/doc.php?id=BOE-A-2020-17264>

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

MEFPD links access to Recovery and Resilience Facility (RRF) funds and other grants to their adoption, creating a strong—if indirect— incentive for each Autonomous Community to embed these tools in its own digital-education strategy.

The application of these frameworks and tools varies across territories. In Spain, there are influenced by cultural, political, and social factors. Although Spain is not legally obliged to transpose EC frameworks, the Ministry of Education references them in the national Digital Education Plan (2020) and makes their use an eligibility criterion for RRF-funded regional projects—providing an indirect but powerful incentive for Autonomous Communities and for the INTEF-governed enclave. Recognizing this diversity, the research team carried out a comprehensive investigation to explore and understand the political approaches that every Autonomous Community in Spain has developed to increase the Digital Competences (DC) of their Teachers and Schools. Spain's decentralized political structure, diverse regional landscape, and ambitious digitization initiatives, guided by the European frameworks and bolstered by recent funding (via RRF that is a temporary instrument of the EU's programme NextGenerationEU to support Europe's economic recovery from the coronavirus pandemic crisis), provide an ideal environment for understanding the territorial enactment of EC Tools and Frameworks. The primary aim of this research was to identify how these tools (SELFIE and SELFIEforTEACHERS) and frameworks (DigCompOrg, DigCompEdu and DigComp) have been included/used/ as inspiration – or not— in these developments and the rationale behind these decisions, from a regulatory point of view (Castañeda et al., 2023). The information collected came from national and regional educational stakeholders, reflecting their own perspectives.

2. Leadership Strategic Styles: Guidance and Empowerment as perceived extremes of a continuum

Leadership determines who drives digital innovation, how authority is shared, and what professional agency teachers retain—three levers that condition the success or failure of territorial digital-policy enactment (Ball 2016; Forde & Torrance 2021). Because those levers determine which digital tools are selected, resourced and legitimised, leadership becomes a primary lens for understanding why similar policies produce different outcomes during digital transformation.

Although the theoretical framework borrows from classic leadership styles, our analysis focuses on how these forms of leadership are reflected in territorial decision-making. Therefore, we use the term strategic leadership styles to refer to the policy logics or approaches—rather than to personal traits of individual leaders.

As noted above, in any political initiative, different factors and aspects are considered, including technical decisions but not only. Decisions regarding any adoption in education, including of course digital transformation, have impacts on various aspects of the educational culture and on the perception and engagement of participants in the change process (Ball, 2016; Forde and Torrance, 2021). Various researchers have

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

remarked the emergence of bottom-up new forms of governance that undertakes the relevance of the participants' responsibility (Forde and Torrance, 2021). Nevertheless, the way responsibilities are distributed and digital transformation policies are implemented in different territories and institutions impact fundamental concepts such as teachers' professional agency (understood as their decision-making capacity) (Campbell, 2019; Pantić, 2021), and give participants –mostly teachers and schools principals– more or less autonomy, in a context where professional autonomy can directly affect educational processes (Biesta et al., 2020; Priestley et al., 2015).

Guidance-oriented leadership is leader-centred, stresses formal authority and efficiency, and relies on clear rules and external monitoring to ensure uniform roll-out (Helmold 2020; OECD 2012; Robbins 2016). Empowerment-oriented leadership redistributes decision-making, cultivates professional identity and community, and frames change as a collective, public process (Tomassini et al. 2011; Banutu-Gomez 2015). It aims to enhance individuals' abilities and confidence to act autonomously and make decisions, cultivating a sense of autonomy and self-value among individuals within the organization (Robbins, 2016). It fosters the creation of individual pathways to identity construction, while also providing space for emotional expression and functioning as communities of practice (Tomassini et al., 2011). Additionally, it ensures that every level feels involved in decision-making processes and recognizes change as a public event, encourages citizen engagement and collective action, offers opportunities for developing one's competences and perceives empowerment because of changing work conditions (Banutu-Gomez, 2015; OECD, 2012).

However, the conditions of these adoption styles are neither linear nor simple. Territorial policies that prioritise guidance recognise that no single style fits all situations, and the approach is adapted by borrowing elements from other styles or completely changing their style based on the circumstances (Helmold, 2020). Empowerment, by its part, is a gradual process that requires sustained engagement and the ability to balance short-term and long-term impacts, and advocates for collective actions to effect political change and supports decentralization while strengthening local governance (OECD, 2012).

Nevertheless, both sides, depending on many contextual conditions, are crucial for effective leadership in workplace, and for human development, as highlighted in the research (Banutu-Gomez, 2015; Helmold, 2020; OECD, 2012).

In practice, boundaries blur the two styles are not mutually exclusive. Hybrids emerge when territorial strategies mix central templates with local discretion or when autonomy is granted but bounded by national evaluation tools. Research shows that context—system size, political alignment and digital culture—often pushes territories towards one pole while borrowing practices from the other (Biesta et al. 2020; Campbell 2019).

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

Analysing Spain's regions through this lens therefore illuminates the grey zones where guidance and empowerment intersect, revealing how territorial authorities balance coherence, equity and teacher agency during rapid digitalisation.

3. Methods

As previously mentioned, the research underlying this study has investigated the way Spanish territories have approached the digital transformation of education in their territories. In this article, we examine the decisions that have led different territories to different kind of leadership.

To examine the various approaches from different territories to gain a comprehensive understanding of a very particular phenomenon—we adopted a multiple case study approach (Stake, 2005).

The data for this research was collected through in-depth interviews conducted with policymakers, including representatives from the national approach led by the Ministry of Education and Vocational Educational Training (MEFP) through the National Institute for Educational Technology and Teachers' Training (INTEF). Additionally, interviews were conducted with officials responsible for digital education policy enactment in 15 of the 17 Spanish Autonomous Communities (Aragón, Islas Baleares, Canarias, Cantabria, Castilla-La Mancha, Castilla y León, Cataluña, Comunidad de Madrid, Comunidad Foral de Navarra, Comunidad Valenciana, Extremadura, País Vasco, Principado de Asturias, Región de Murcia and La Rioja). All interviewees held formal responsibility for designing or coordinating the territory's digital-education plan; no classroom teachers or school-level staff were interviewed. Nevertheless, some officials had previously worked as teachers or school leaders and therefore brought practitioner experience to their current roles; the other interviewees had backgrounds in public administration or ICT policy. Throughout the article we therefore refer to them collectively as 'policy-level officials', while acknowledging that some also possess first-hand pedagogical expertise. All interviewees operated within this shared-competence structure, where regional ministries implement policy under the national baseline set by the MEFP.

We conducted 16 semi-structured online interviews, one per territory. Fourteen interviews involved a single official; two territories preferred a paired interview, giving a total of 18 participants. Each Autonomous Community's education ministry (or, for INTEF, the national Directorate-General) was asked to nominate the person formally responsible for the regional digital-education plan; ministries decided whether that role was shared by two officials. Although multiple contact attempts were made, representatives from Andalusia and Galicia were unavailable to participate during the study window due to scheduling limitations associated with post-election administrative turnover. Their exclusion was not intentional, and both regions conveyed interest in future engagement. No intentional exclusion was made by the research team, and both regions expressed interest in future collaboration. Despite these absences, the 15

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

participating territories represent approximately 64% of Spain's school population and all major geographic zones.

We use the umbrella term territory for any sphere in which a public authority designs and executes digital-education policy. Fifteen territories correspond to Spain's Autonomous Communities. The sixteenth covers Ceuta, Melilla and the network of Spanish schools abroad, which are administered directly by the National Institute for Educational Technology and Teacher Training (INTEF) under the Ministry of Education, VET and Sports. Although INTEF is a national agency rather than a regional government, within this enclave it performs the same executive functions as an Autonomous Community: setting strategy, allocating resources and supporting teacher professional development. Treating the INTEF enclave as a territory therefore places all sixteen cases (coded A–P for anonymity) on an equal analytical footing and allows us to compare guidance- and empowerment-oriented leadership styles across the full spectrum of governance arrangements in Spain. For tabular summaries we replace those letter labels with non-sequential numeric codes (1–16) generated at random; the mapping is known only to the research team and cannot be reverse-engineered by readers.

For the interviews, we utilized a semi-structured interview script that was developed collaboratively and underwent multiple iterations for refinement. It included sections framing the interview objectives, providing contextual information, and structuring questions about educational digital transformation plans, utilization of EC Tools and Frameworks, and other relevant topics (all the instruments are available in the general report at Castañeda et al., 2023). Besides the core blocks on the territorial plan and the use of EC frameworks, the guide contained a short section on contextual drivers and barriers (e.g., "What political or historical factors have facilitated or hindered this plan in your territory?") as well as prompts on funding flows and stakeholder roles. These questions connect the interview data with our objective of relating leadership choices to each region's specific conditions. Contextual cues (e.g., technical capacity, funding dependence) are reported only when raised by interviewees. The interviews were conducted in Spanish, considering it as the primary language used during the data collection process.

To facilitate homogeneity among interviewers, a checklist was developed to ensure consistency in following the interview process. The participants were selected through a self-selection process initiated by each Autonomous Community, following a request for participation from the research team and supported by the national Spanish Ministry of Education, VET and Sports. The data obtained from interviews were analysed using descriptive and deductive coding methods, aiming to identify patterns, themes, and insights related to the study objectives. The interviews content was coded using a deductive method based on the traits of the two leadership styles discussed in the previous section. This coding process was conducted in two stages. In the first stage, the project team followed a simultaneous coding method (Saldaña, 2015) that used a

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

deductive concept-driven approach for identifying segments that clearly reflected the leadership style traits mentioned in the literature.

The set of leadership traits used to analyse the interviews was developed deductively based on the theoretical contributions reviewed in the literature, particularly Helmold (2020), Banutu-Gomez (2015), Robbins (2016), OECD (2012), and Tomassini et al. (2011). These sources provided the foundation for defining a table of traits associated with guidance- and empowerment-oriented leadership, which was then used to code and interpret each interview, as follows:

Traits related to Guidance leadership

- Guidance.1. Motivating Teams: Encouraging collective work towards common goals and objectives.
- Guidance.2. Balanced Power Distribution: Ensuring a balance between formal authority and informal influence.
- Guidance.3. Assumption of Limited Knowledge: Recognizing individuals' limited understanding of the process, content, or dynamics of change.
- Guidance.4. Adaptability: Acknowledging that a single leadership style may not be suitable for all situations and being willing to adapt accordingly.
- Guidance.5. Focus on Efficiency: Maintaining a strong emphasis on achieving efficient outcomes.

Traits related to Empowering leadership:

Empowering.1.	Redistribution of Tasks and Decision-Making Power.
Empowering.2.	Creation of Personal Identity Pathways and recognizing the importance of emotions within leadership contexts.
Empowering.3.	Functioning as Communities of Practice.
Empowering.4.	Development of Individual Competencies.
Empowering.5.	Empowering Changes in Working Conditions.
Empowering.6.	Inclusive Involvement, every participant feels involved.
Empowering.7.	All participants understand the change as public.
Empowering.8.	Interdependence of Decisions.
Empowering.9.	Shared Knowledge.
Empowering.10.	Time and Sustained Engagement.
Empowering.11.	Support for Decentralization and Local Governance.
Empowering.12.	Fostering a sense of autonomy and self-value.

In the second stage, the results of the previous coding were analysed to create a general characterization of the specific case-territory. Finally, the segments that were clearly linked to specific traits were analysed to gain a detailed understanding of them.

Although an analysis has been carried out that includes the identification of segments associated with traits, we understand that the assessment of each interview as being

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

close to one or another leadership style cannot correspond to an evident quantitative criterion but is revealed not only in the number of associated segments, in what these segments affirm, but also in the distribution of these segments. Distribution' refers to how widely a given code appeared across the five topical sections of the interview guide (strategy design, teacher training, monitoring, funding, perceived barriers). A leadership style was considered dominant when its codes were both numerically frequent and dispersed across several sections, indicating that the theme permeated the interview rather than being mentioned in one isolated block.

For every interview we created a dedicated spreadsheet with one row per a-priori code (the 17 guidance/empowerment traits) and five columns corresponding to the topical sections of the interview guide (strategy design, teacher training, monitoring, funding, barriers). A cell was ticked yes when at least one quotation in that section evidenced the code, and the relevant quotation(s) were pasted beneath the tick for context. Thus, distribution of coded segments refers to how many topical sections within the same interview contained the code, not merely how often it appeared. A leadership style was judged dominant when its codes were both frequent and spread across several sections, showing that the theme permeated the conversation. With sixteen transcripts, a spreadsheet offered sufficient functionality (filtering, pivot tables) while keeping the data visible to the whole team. Automated text-mining or machine-learning tools were deemed unnecessary because the small corpus allowed close, context-rich reading by the interviewers themselves.

To benefit the project and emphasize the constructive focus of our study, we decided to anonymize the cases included in this study; therefore, the Autonomous Communities will be referred as "territory A," "territory B," etc.

4. Findings

Given that this study focuses on analysing how different territories approached the leadership of digital transformation in education, we first summarise the presence of each trait across all territories (Table 1) and then discuss the results of the coding of the various traits identified based on the 'profiles' to which the various territories respond.

Table 1. Frequency of each leadership trait (all territories aggregated)

Trait	Territories	
	n	%
Traits related to Guidance leadership		
Motivating Teams: Encouraging collective work towards common goals and objectives.	8	50%
Balanced Power Distribution: Ensuring a balance between formal authority and informal influence.	8	50%

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

Trait	Territories	
	n	%
Assumption of Limited Knowledge: Recognizing individuals' limited understanding of the process, content, or dynamics of change.	6	38%
Adaptability: Acknowledging that a single leadership style may not be suitable for all situations and being willing to adapt accordingly.	13	81%
Focus on Efficiency: Maintaining a strong emphasis on achieving efficient outcomes	11	69%
Traits related to Empowering leadership		
Redistribution of Tasks and Decision-Making Power.	7	44%
Creation of Personal Identity Pathways and recognizing the importance of emotions within leadership contexts.	6	38%
Functioning as Communities of Practice.	8	50%
Development of Individual Competencies.	11	69%
Empowering Changes in Working Conditions.	5	31%
Inclusive Involvement, every participant feels involved.	4	35%
All participants understand the change as public.	0	
Interdependence of Decisions.	9	56%
Shared Knowledge.	3	19%
Time and Sustained Engagement.	7	44%
Support for Decentralization and Local Governance.	6	38%
Fostering a sense of autonomy and self-value.	4	25%

This analysis explores how some territories seem more committed to clear guidance processes for institutions, while others seem to prioritise the empowerment of educational institutions and teachers.

4.1. Profiles for leadership style

4.1.1. Guidance Leadership Style

Half of the territories analysed—eight out of the sixteen (including the fifteen autonomous communities plus the enclaves of Ceuta, Melilla, and overseas territories administered by INTEF)—display a leadership style that aligns predominantly with the guidance-oriented approach. These territories (B, C, E, F, H, I, J, and K) articulate development proposals that emphasize direction, structure, and expert-led processes, consistent with the features identified in the guidance framework.

Among them, Territories B and K stand out for the comprehensive presence of guidance-related traits in their interviews. In Territory K, nearly all traits are represented except for Guidance.2 (Balanced Power Distribution), while in Territory B, all are present except for Guidance.4 (Flexibility to Change Leadership Style if Necessary). These omissions do not undermine the overall impression; both interviews convey a

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

clear preference for leadership that is structured, centralized, and oriented towards providing direction.

A particularly interesting case is Territory H, where the interview does not contain multiple distinct references to the guidance traits, but rather, certain traits such as Guidance.2 and Guidance.5 (Focus on Efficiency) appear to permeate the entire discourse. Though not explicitly itemized in separate statements, these dimensions define the overall tone and approach of the leadership described, indicating a strong internal coherence with the guidance style.

In most of these guidance-oriented interviews, traits associated with empowering leadership are either minimal or completely absent. Only Territories B and F include isolated references to empowering traits. In Territory B, the presence of Empowering.4 (Development of Individual Competencies) is evident in their focus on targeted training efforts:

"we focused a lot of the courses on digital competence and then on the tools that were specifically requested" (Interview, Territory B).

This illustrates a recognition of the need to build individual capacity, though it is embedded within a broader, top-down training strategy rather than a decentralised approach to empowerment.

In the case of Territory F, the only empowering trait identified is Empowering.8 (Interdependence of Decisions). The interview reflects an awareness of how institutional decisions frame and legitimize individual actions, as seen in the following quote:

"You had to use this tool and fulfil these blocks of the school's Digital Plan so that it could be seen that the modality in which you were participating in ANONYMIZED was part of a school strategy, not an occurrence of a teacher who really likes these things" (Interview, Territory F).

Here, the emphasis is placed on the alignment of individual initiatives with collective institutional frameworks, which, although empowering in terms of coordination, remains tightly coupled with top-down validation.

Overall, the interviews in these eight territories reflect a leadership approach where guidance is foregrounded, and empowerment—when it appears—is instrumental and constrained, rather than fully integrated as a guiding principle.

4.1.2. Empowering Leadership style

Only in one of the cases (Territory G) there is no clear allusion to leadership focused on guidance. However, in this territory, there is strong and consistent evidence of a leadership style entirely oriented towards empowerment. The whole interview revolves

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

around the idea of promoting autonomy, shared responsibility, and emotional connection with the schools, which corresponds directly with multiple traits of the empowering leadership category defined in our coding framework.

A first relevant trait identified in the discourse is the redistribution of tasks and decision-making power (Empowering.1). The respondents emphasize not only their commitment to the schools, but also how resources are strategically allocated to enhance local agency and effectiveness:

"We are committed to the people in the schools. They go to schools periodically and, so to speak, almost weekly. That is why we have made a commitment that this investment, these economic funds, should be invested in resources that we can strengthen" (Interview territory G).

This quote shows how leadership is exercised through concrete actions that shift power and responsibility to the local level, fostering empowerment through support rather than control.

In addition, the interview highlights the creation of personal identity pathways and the recognition of emotions as central elements of leadership (Empowering.2). Leadership here is not reduced to planning and control—it is about building trust through personal connection and affective engagement:

"First and foremost, listen. To listen you have to go. You have to go. To go means to go personally to the schools. And once you have listened to the schools and, obviously, you have visited the schools, work with them" (Interview territory G).

This statement illustrates how being physically present and emotionally attuned is understood as a prerequisite for authentic collaboration and co-construction of meaning, aligning with the affective dimension of empowering leadership.

Finally, a key point in the interview is the way school autonomy and self-assessment are supported and encouraged, corresponding to the trait fostering a sense of autonomy and self-value (Empowering.12). The use of strategic tools like SWOT (Strengths – Weaknesses – Opportunities – Threats (strategic-diagnosis matrix)) and CAME (Correct – Adapt – Mitigate – Exploit) matrices is presented not as an obligation, but as a possibility that each school can adapt to its own context and goals:

"Then we also proposed to them, based on the selfie, to carry out the SWOT matrix, this matrix that allows us to even some of us have gone a little further and we have also carried out the CAME matrix, so that each centre could work on it" (Interview territory G).

In this case, therefore, the leadership narrative is consistently aligned with a logic of empowerment, making Territory G a paradigmatic example of this style in our study.

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

4.1.3. Mixed Leadership Style

Seven territories (A, D, L, M, N, O and P) exhibit a more balanced approach that places them in an intermediate position on the guidance–empowerment continuum. These cases combine elements of directive support—typical of guidance leadership—with practices that foster autonomy, participation, and distributed agency, which are core features of empowering leadership.

Among them, Territory O presents the most balanced case. This territory brings to the forefront issues tied to guidance, particularly regarding the importance of motivation as a leadership tool (Guidance.1). The interview emphasizes the need to persuade rather than impose changes on teachers and institutions, reinforcing the idea that leadership must show the practical benefits of innovation to promote authentic engagement. The interview also reflects concerns about the lack of perspective and overestimation of digital competence by some participants (Guidance.3), underscoring the necessity of tailored guidance for effective development.

At the same time, Territory O also displays a firm commitment to empowerment. Several traits from our framework emerge here, including functioning as communities of practice (Empowering.3), inclusive involvement (Empowering.6), interdependence of decisions (Empowering.8), time and sustained engagement (Empowering.10), and support for decentralization (Empowering.11). These are illustrated in quotes such as:

"it is on a webinar/videoconference format and it allows them to reconcile much more, that is to say, it has allowed people to train at their own pace" (Interview with Territory O)

This quote reflects sustained engagement (Empowering.10) and inclusivity (Empowering.6), showing that leadership choices are adapted to individual needs, enabling flexible, self-directed professional development.

In parallel, the same territory comments on the dependence of smaller regions on national structures for evaluation tools, revealing a nuanced tension between empowerment and structural limitations:

"For the evaluation we will use the INTEF tool [a tool created by INTEF], the small communities do not have the capacity of developing their own". (Interview with Territory O).

Here, the reference to considering others as "allies" and to "empowering them" speaks directly to the intention of sharing leadership and involving other actors in strategic decisions.

A similar notion appears in the interview with Territory L, where autonomy and flexibility are at the forefront of leadership strategies:

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

"we have taken them as allies and empowered them, which was what we wanted at the time". (Interview with Territory P).

This quote reflects traits such as Empowering.1 and Empowering.12 (Fostering a sense of autonomy and self-value), emphasizing leadership through enabling rather than directing.

Nevertheless, these same territories also articulate a leadership stance grounded in guidance, particularly in response to knowledge gaps or uncertainties among participants. A quote from Territory N illustrates this:

"from 2006 onwards, all of us who are in counselling have been telling people, now it's not done like this, now it's done like this, and people asked us to tell them how to do things" (interview with territory N).

This reflects Guidance.3 (Addressing Lack of Perspective), revealing a demand for clear direction and training, where leaders are seen as reference points for best practices.

We also observe also motivation as a key to leadership (Guidance 1), when respondents say for example that:

"now our mission is to convince people to use this for educational purposes, it takes a lot of work, that transformation of an ICT [Information and Communication Technology] coordinator" (Interview territory N).

This statement highlights the emotional and persuasive dimension of leadership, aiming to foster buy-in rather than impose mandates.

All guidance traits appear in the discourse—except for Guidance.1 (Motivation)—but the presence of empowering elements such as Empowering.2 (Personal Identity and Emotions), Empowering.4 (Development of Individual Competencies), Empowering.8 (Interdependence of Decisions), Empowering.9 (Shared Knowledge), and Empowering.10 (Time and Sustained Engagement) shows that this territory also recognizes the importance of long-term professional growth and distributed responsibility. In this case, the coexistence of both leadership logics reflects an awareness of institutional complexity and the need to adapt leadership practices accordingly.

Table 2 details the presence of every trait in each territory, using the anonymised numeric codes defines in the Methods section. A cell was marked X when at least one quotation in that section evidenced the trait; therefore the tables report whether a trait surfaced, not how many times it was mentioned.

Table 2. Trait matrix by territory (anonymised numeric codes).

TERRITORY N	PROFILE	% G TRAITS	G					% E TRAITS					E					
			G1	G2	G3	G4	G5	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11
1	Both - E bias	80	X		X	X	X	66,67	X	X	X	X	X		X		X	
2	Both	40	X					41,67			X			X	X	X	X	X
3	Both - E bias	60	X			X	X	58,33	X	X		X			X	X	X	X
4	Both - E bias	80	X	X		X	X	75,00	X	X	X	X	X	X	X	X	X	X
5	Both - E bias	40			X	X		41,67	X			X				X	X	X
6	Guidance	80	X		X	X	X	25,00			X	X			X			
7	Guidance	60			X	X	X	25,00			X			X			X	
8	Guidance	60		X		X	X	16,67			X	X						
9	Guidance	40		X		X		25,00			X	X	X					
10	Empowerment							41,67	X	X		X					X	X
11	Guidance	60			X	X	X	8,33							X			
12	Guidance	60	X			X	X	25,00		X	X						X	
13	Both - G bias	80		X	X	X	X	41,67			X	X			X	X	X	
14	Guidance	60	X	X		X		33,33	X	X		X	X					
15	Guidance	80	X	X		X	X	8,33			X							
16	Both - E bias	40	X	X				50,00	X		X	X	X		X	X	X	X

4.2. Cross-cutting Leadership Traits: Prevalence and Absences:

When analysing the leadership traits individually—beyond their classification under a general leadership style—it becomes evident that most of the territories studied (fifteen out of sixteen, all except Territory G) express features that relate simultaneously to both guidance and empowerment. This reinforces the idea that leadership practices in these contexts are hybrid in nature, and that individual traits can often coexist across the continuum.

Among the traits examined, one of the most widespread is the focus on efficiency (Guidance.5), defined as the maintenance of a strong emphasis on achieving concrete and timely outcomes. This trait appears clearly in 13 out of 16 interviews and is often linked to strategies for meeting objectives through structured planning or resource optimization. For instance, Territory L stresses the importance of aligning efforts around common deadlines and shared expectations:

"We have all started at the same time and the same deadline, it is a question of willingness to meet the objective or not" (interview with Territory L).

This statement reflects a leadership culture that prioritizes goal orientation and expects commitment from all participants to reach agreed-upon targets.

A complementary view is expressed by Territory D, where efficiency is associated with the centralization of expertise and the use of pre-designed materials to save time and streamline policy enactment:

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

"The fact that a group of experts has been prepared, revised, adapted and made available benefits us all because we are not experts and it saves us a lot of time" (interview with Territory D).

Here, the guidance-oriented trait of efficiency is operationalized through resource provision and expert support, reducing the burden on individuals and facilitating swift action.

In addition to this dominant trait, eleven territories provide evidence of a dual emphasis on two traits that, although categorized under different styles, are complementary in practice: Guidance.3, which reflects the assumption that participants may have limited knowledge of the process or digital change; and Empowering.4, which involves the intentional development of individual competencies to address such limitations.

This convergence suggests that many leadership approaches acknowledge knowledge gaps while simultaneously taking steps to bridge them through capacity-building and support, revealing synergies rather than opposition between the two logics.

On the contrary, one trait—Empowering.7, defined as the shared understanding that the change process is public and collective—is notably absent or unclear in the interviews. While other empowering traits such as autonomy or redistribution are widely cited, this particular aspect of public awareness and shared responsibility for change is not explicitly articulated by participants. This could reflect an implicit assumption, or it may signal that the collective and political dimensions of transformation remain underemphasized in leadership discourses at the local level.

In sum, the independent analysis of traits highlights both the fluid boundaries between leadership styles and the importance of examining specific practices that may not align neatly with a single category, but instead reflect the complexity and pragmatism of educational leadership in action

5. Conclusions and Discussion

In general terms, the analysis identifies three distinct leadership profiles among the territories: guidance-focused leadership, empowerment-focused leadership, and mixed or adaptable leadership style.

Half of the Autonomous Communities in Spain (eight territories out of the sixteen studied) emphasize guidance-related features in their development proposals. The prevalence of guidance-focused leadership suggests a preference for maintaining control and ensuring consistency across educational initiatives.

Seven territories combine guidance and empowerment traits. In their interviews, structured directives (e.g., common timelines and centrally prepared materials) coexist with references to autonomy-enhancing practices such as self-paced teacher training

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

or school-led diagnostic tools. This pattern indicates that leadership arrangements in Spain often draw flexibly from both ends of the guidance-empowerment continuum rather than conform to a single ideal type.

Spain's decentralised system—coupled with national soft-law incentives—thus offers an informative case for other contexts seeking to understand how non-binding European frameworks translate into diverse regional strategies. While guidance-oriented approaches are more prevalent, the integration of empowerment elements shows that territories adapt leadership practices to local technical capacity, funding conditions and political alignment. Future work that triangulates stakeholder accounts with systematic political or infrastructural indicators could clarify why a given territory gravitates toward one part of the continuum.

Only one Autonomous Community displayed an almost purely empowerment-focused leadership style, with no clear allusions to guidance traits. This approach is seen as both a responsibility and a motivational tactic, enhancing the engagement and commitment of educators towards common goals (Banutu-Gomez, 2015; Helmold, 2020).

Most territories (15 out of 16) exhibit traits associated with both leadership styles. The Focus on Efficiency (Guidance 5) seems capital for most of the Autonomous Communities: 13 territories emphasize achieving efficient outcomes. Many of the governments participated in this interview (11 of them) assume individuals' (teachers') and institutional (schools') limited understanding of the process, content, or dynamics of change (Guidance 3). Nevertheless, most of them (11 Autonomous Communities) also highlight the importance of developing individual/institutional competences for the change (Empowering 4).

It is remarkable that none of them pointed issues related to the understanding of the public nature of the change, they do not specifically mention the importance for participants to understand the processes either the expected changes (Empowering 7).

The ongoing conversation between agency and structure highlights the complex interplay between individual actions and systemic conditions. In this context, empowerment is not only about granting autonomy, but also about motivating individuals to align with organisational goals, thus improving overall performance and commitment (Banutu-Gomez, 2015).

The study indicates a prevalence of mixed leadership approaches among the Autonomous Communities in Spain. This blend of guidance and empowerment reflects a comprehensive strategy towards educational leadership, aiming to balance structured oversight with fostering independence and initiative among educators and institutions. While guidance-focused leadership remains dominant, the integration of empowerment elements highlights a nuanced approach to leading digital

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

transformation in education. This combination of strategies underscores the importance of adaptability and responsiveness to both local and global educational challenges.

The unique conditions and comprehensive approach of this study in Spain offer a useful vantage point for examining how non-binding EU frameworks are interpreted and operationalized in diverse governance settings. Spain's decentralized political structure, diverse regional landscape, and ambitious digitization initiatives, guided by the European frameworks and bolstered by recent funding, provide an ideal environment for understanding how the territorial operationalisation of EC Tools and Frameworks lead to the digital transformation of education. By examining Spain's experiences, other territories can glean valuable insights into navigating similar challenges and may inform future comparative and policy work in other settings. Our findings illustrate how 'soft-law' EU tools can still orient sub-national leadership choices when coupled with funding streams and reputational pressures. The typology must be read against Spain's two-tier governance: the MEFPD supplies a non-binding but financially incentivised framework, and each Autonomous Community chooses how closely to align. The complete study offers a comprehensive analysis of Spain's educational landscape but also provides grounded insights for policymakers and researchers seeking to understand and navigate digital transformation processes in diverse educational settings.

The recommendations below are a concise extract from the broader JRC science for policy report that extends this interview study (Castañeda et al., 2023). That report draws on the same interview corpus plus documentary analysis, so the recommendations complement—rather than derive solely from—the data presented in this article: i) a clear need to contextualize the digital transformation plans to the "local" circumstances, needs and interests; ii) providing space for flexibility and adaptation in the use of EC resources (adapt vs adopt); iii) importance of defining clear and transparent goals of the plan; iv) awareness among the education community is key for the success of the plan and finally, and v) support teachers as agents of change.

Across the guidance-dominant territories, interviewees pointed to three shared conditions: (i) large school systems requiring central coordination; (ii) lower in-house technical capacity, which increases reliance on national templates; and (iii) political alignment with the national government during the RRF funding cycle. By contrast, the empowerment-dominant territory is small, enjoys a long-standing digital culture, and has access to a stable team of itinerant advisors. Mixed territories typically combine mid-level technical capacity with a rhetorical commitment to school autonomy, but temper it through common evaluation tools supplied by the MEFPD or neighbouring regions. These tentative patterns suggest that future comparative research should jointly consider system size, prior digital infrastructure, and inter-governmental funding dependence when analysing leadership choices in digital education policy.

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

Several territories closely mirror the INTEF framework, whereas others diverge from it, a pattern that appears linked to differences in political alignment with the national government and in the technical capacity available within their administrations.

This study presents limitations that should be acknowledged. First, the analysis of leadership styles is based on interviews with individuals appointed by each regional government as responsible for digital education. While these figures hold significant responsibility and decision-making power, their accounts may not fully represent the broader political dynamics or all layers of policy implementation. Second, the study focuses on how digital transformation is discursively framed by policymakers rather than examining the actual practices or effects of these strategies across the system. This was a deliberate choice, as the aim was to understand the narrative construction of leadership approaches rather than their operational deployment. Third, although we repeatedly contacted all Autonomous Communities, interviews could not be secured in two key regions (Andalusia and Galicia) due to scheduling constraints beyond our control. Despite these limitations, the study offers valuable insights into how subnational educational leadership is articulated in the context of digital transformation.

Understanding local policies and their adoption is crucial for assessing their impact on national and global agendas. Explaining why a territory gravitates toward guidance or empowerment will require future studies that triangulate stakeholder accounts with systematic political, economic and infrastructural indicators. Analysing leadership styles within specific territories provides concrete examples of practices that can influence broader educational policies. As Ball (2016) suggests, critical examination of territorial leadership approaches helps us understand how these practices shape and are shaped by national and global educational agendas.

Acknowledgements

This study would not exist without the collaboration of all the participants for gave their time and knowledge during the interviews. We are also grateful to the journal's anonymous reviewers for their thoughtful suggestions, which have substantially improved the final manuscript.

Declaration of conflicting interests

The authorship team declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article

Funding

This work was supported by Contract JRC- UM Ref. JRC/SVQ/2022/VLVP/1897 - Digital Competence in Spanish Education. Strategical Regional Approaches

Ethics

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

This study follows the JRC's ethical requirements and was approved by the University of Murcia Research Ethics Committee (ID: 4144/2022) on October 10, 2022.

Data availability

The data that support the findings of this study are available from the corresponding author, [Linda Castañeda], upon reasonable request. The data are not publicly available due to their containing information that could compromise the privacy of research participants.

Author contributions:

Linda Castañeda was responsible for conceptualization, methodology, formal analysis, investigation and writing. Virginia Viñoles-Cosentino and Ana Yara Postigo-Fuentes were responsible for investigation, data collection, formal analysis and original draft preparation. Cesar Herrero-Ramila and Romina Cachia were participated on conceptualization, and methodology of the study, as well as review & editing the final draft.

References

Avello-Martínez R and Marín VI (2016) The necessary training of teachers in collaborative learning. *Profesorado* 20(3): 687–713.

Ball SJ (2003) The teacher's soul and the terrors of performativity. *Journal of Education Policy* 18(2): 215–228.

Ball SJ (2016) Following policy: networks, network ethnography and education policy mobilities. *Journal of Education Policy* 31(5). Routledge: 549–566.

Banutu-Gomez MB (2015) Understanding Leadership and Empowerment in the Workplace. *European Scientific Journal, ESJ* 11(35). 35.

Biesta G, Takayama K, Kettle M, et al. (2020) Teacher education between principle, politics, and practice: A statement from the new editors of the Asia-Pacific Journal of Teacher Education. *Asia-Pacific Journal of Teacher Education* 48(5). Routledge: 455–459.

Bozkurt A, Jung I, Xiao J, et al. (2020) A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education* 15(1). 1: 1–126.

Caena F (2014) Teacher Competence Frameworks in Europe: policy-as-discourse and policy-as-practice. *European Journal of Education* 49(3): 311–331.

Campbell L (2019) Pedagogical bricolage and teacher agency: Towards a culture of creative professionalism. *Educational Philosophy and Theory* 51(1): 31–40.

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

Castañeda L, Viñoles-Cosentino V, Postigo-Fuentes AY, et al. (2023) *Strategic Approaches to Regional Transformation of Digital Education*. Science for Policy Report JRC134282. Luxembourg: Publications Office of the European Union. Available at: <https://publications.jrc.ec.europa.eu/repository/handle/JRC134282>.

Castro Benavides LM, Tamayo Arias JA, Arango Serna MD, et al. (2020) Digital Transformation in Higher Education Institutions: A Systematic Literature Review. *Sensors* 20(11). 11. Multidisciplinary Digital Publishing Institute: 3291.

Cetindamar Kozanoglu D and Abedin B (2020) Understanding the role of employees in digital transformation: conceptualization of digital literacy of employees as a multi-dimensional organizational affordance. *Journal of Enterprise Information Management* 34(6). Emerald Publishing Limited: 1649–1672.

Cobo C and Rivas A (eds) (2023) *The New Digital Education Policy Landscape*. 1st edition. New York: Routledge.

Delgado A, Wardlow L, O'Malley K, et al. (2015) Educational Technology: A Review of the Integration, Resources, and Effectiveness of Technology in K-12 Classrooms. *Journal of Information Technology Education: Research* 14: 397–416.

Esteve-Mon FM, Postigo-Fuentes AY and Castañeda L (2023) A strategic approach of the crucial elements for the implementation of digital tools and processes in higher education. *Higher Education Quarterly* 77(3): 558–573.

European Commission (2023) *Council Recommendation of 23 November 2023 on the key enabling factors for successful digital education and training*. Official Journal of the European Union, 23 November. Available at: <http://data.europa.eu/eli/C/2024/1115/oj/eng> (accessed 25 June 2024).

European Union (2018) *Council Recommendation of 22 May 2018 on key competences for lifelong learning Text with EEA relevance*.

European Union (2019) Digital Education Action Plan (2021-2027) | European Education Area. Available at: <https://education.ec.europa.eu/node/1518> (accessed 30 May 2022).

Forde C and Torrance D (2021) Leadership at all levels: system alignment through empowerment in Scottish education? *School Leadership & Management* 41(1–2): 22–40.

Helbold M (2020) *Lean Management and Kaizen: Fundamentals from Cases and Examples in Operations and Supply Chain Management*. Management for Professionals. Cham: Springer International Publishing. Available at: <https://link.springer.com/10.1007/978-3-030-46981-8> (accessed 6 May 2024).

Hodges C, Moore S, Lockee B, et al. (2020) The Difference Between Emergency Remote Teaching and Online Learning. *Educause Review*: 15.

Kinchin IM and Winstone NE (2017) Pedagogic Frailty. In: Kinchin IM and Winstone NE (eds) *Pedagogic Frailty and Resilience in the University*. Rotterdam: SensePublishers,

Castañeda, Linda, Viñoles-Cosentino, Virginia, Postigo-Fuentes, Ana Yara, Herrero-Ramila, Cesar, & Cachia, Romina. (2025). Educational empowerment and strategic guidance: A critical perspective on regional educational digital transformation. European Educational Research Journal. The Version of Record of this manuscript has been published in the [European Educational Research Journal](#) on the 8th of December 2025 and is available online at: <https://doi.org/10.1177/14749041251398083>

pp. 211–225. Available at: https://doi.org/10.1007/978-94-6300-983-6_15 (accessed 1 June 2022).

Lestari NDI and Subriadi AP (2021) EdTech Investment: Optimism, Pessimism, and Uncertainty. In: *2021 International Conference on Electrical and Information Technology (IEIT)*, September 2021, pp. 239–245. Available at: https://ieeexplore.ieee.org/abstract/document/9587429?casa_token=dE4qw-DqmgYAAAAA:aDxJltV9PxN1Fil3DS9kDHSYNDCLHoz-kEx9Kz4dxr9lI1TB73jwqQHYCSK4gN96mypadls0r0 (accessed 8 May 2024).

Marín VI and Castañeda L (2023) Developing Digital Literacy for Teaching and Learning. In: Zawacki-Richter O and Jung I (eds) *Handbook of Open, Distance and Digital Education*. Singapore: Springer Nature, pp. 1089–1108. Available at: https://doi.org/10.1007/978-981-19-2080-6_64 (accessed 8 May 2024).

McCarthy P, Sammon D and Alhassan I (2022) 'Doing' digital transformation: theorising the practitioner voice. *Journal of Decision Systems* 0(0). Taylor & Francis: 1–21.

OECD (2012) *Poverty Reduction and Pro-Poor Growth: The Role of Empowerment*. OECD. Available at: https://www.oecd-ilibrary.org/development/poverty-reduction-and-pro-poor-growth_9789264168350-en (accessed 6 May 2024).

Pantić N (2021) Teachers' Reflection on their Agency for Change (TRAC): a tool for teacher development and professional inquiry. *Teacher Development* 25(2). Routledge: 136–154.

Priestley M, Biesta G and Robinson S (2015) *Teacher Agency: An Ecological Approach*. Bloomsbury Publishing.

Reis J and Melão N (2023) Digital transformation: A meta-review and guidelines for future research. *Helicon* 9(1): e12834.

Robbins C (2016) Leadership Initiatives: A Mixed Methods Assessment of Psychological Empowerment. *All Student Theses*. Epub ahead of print 1 April 2016.

Saldaña J (2015) *The Coding Manual for Qualitative Researchers Third Edition*. Edición: Third. Los Angeles ; London: SAGE Publications Ltd.

Stake RE (2005) *Multiple Case Study Analysis*. Illustrated edition. New York London: The Guilford Press.

Tomassini M, Barile A, Fiumara E, et al. (2011) Empowering people through reframing: experiences of guidance practitioners in a public network of career centres. *Reflective Practice* 12(2). Routledge: 251–263.