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## Innovation on the margins of the external evaluation of Portuguese schools

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**Abstract:** Accountability is a tool to support school cultures focused on continuous improvement and promoting education quality. This article presents a study developed in Portugal regarding the external evaluation of schools operated between 2018 and 2021. The study, supported by documentary analysis of 60 external evaluation reports, combines qualitative and quantitative methods to understand whether there is an effect between the strengths and improvement areas and the evaluation assigned by the Inspectorate. The results suggest that a robust strategic vision and mobilising leadership are transversal predictors of all the schools' evaluation domains. Other predictors are academic outcomes, teaching and learning-focused self-assessment, deepening self-evaluation practices, active teaching and learning methodologies, and commitment to inclusion. Some correlations presented problematic levels of consistency. No relationships were found between school evaluation and the factors regarding innovation. Thus, innovation appears as a marginal dimension of the school's reality with no relevant impact on the external review.

**Keywords:** external evaluation; innovation; school improvement; accountability; leadership; school autonomy; school self-evaluation; trust evaluation; mobilising middle leadership; school vision.

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## 1 Introduction

All over Europe, changes in educational systems regarding decentralisation emerged 20 years ago to deliver autonomy to schools. This transnational policy convergence advised greater autonomy for the schools and performance-based accountability systems to provide control through goal setting, evaluation, and steering (OECD, 2020a). Autonomy appeared as a solution to improve the school's responsiveness to society and produce more inclusive educational systems. Likewise, strengthened accountability is assumed to enhance education quality and promote school development (Donaldson, 2013; OECD, 2015). Even though there is reinforcement in administrative decentralisation and schools' autonomy, the association between bottom-up initiatives and schools' performance and quality is not impressive (Hargreaves and Ainscow, 2015; Barroso, 2018). Additionally, Verger et al. (2019) enumerated a broad range of problems regarding the educational systems, including the lack of transparency in public administration, its low overall performance, equity issues, learning gaps, and the lack of teachers' engagement.

Neoliberalism ideologies and globalisation influence educational systems and demand for schools as organic systems able to create and recreate systemic transformation strategies and responsiveness to social change. School cultures focused on accountability, and innovation became tools for continuous improvement. Moreover, the leadership's tutelage is crucial in disrupting and providing alternatives regarding systemic priorities due to teaching and learning (Keddie, 2015) and school responsiveness. The school transformation depends on leadership to promote innovative ideas and good practices (Sotiriou et al., 2016), a climate supportive of teachers' professional learning (Walder, 2017; Nóvoa, 2019; Xiong, 2021), work motivation (Hargreaves, 2019; Fuad et al., 2022), intrinsic collaboration (Shirley et al., 2020), wish for experimentation and comprehensive communication to ensure sharing, diffusion, and engagement (Kaewsaeng-on et al., 2022).

This article presents empirical research concerning the Portuguese school inspection action developed between 2018 and 2021. In this period, educational reform was introduced in Portugal, and autonomy, curricular flexibility, and innovation forged new forms of school organisation and management. Through the eyes of the inspection activity, this research intends to describe these new modes of organisation of Portuguese schools. It looks for comprehending associations between the school's external evaluation substance and the school's practices. The article is oriented by the following research questions: *What are the schools' organisational, pedagogical, and cultural attributes that determined external evaluation (Inspectorate's perception of the schools' quality)? Which indicators - aspects of the school organisation and practices - emerge as predictors of each domain evaluated by the Inspectorate? What importance is given to innovation in the schools' external evaluation?*

## 2 Theoretical frameworks

### 2.1 *Autonomy hand in hand with accountability*

Transnational ideologies urge governments to invest in balanced processes of decentralisation/re-regulation and autonomy/accountability. “PISA results suggest that, when autonomy and accountability are intelligently combined, they tend to be associated with better student performance” [OECD, (2011), p.1]. Hence, educational policies and national reforms normalised the *modus operandi* of *autonomy hand in hand with accountability*. In practice, the “governments (in their role as principals) are expected to give more autonomy to schools (the agents) in organisational, budgetary, or curricular terms,” and the schools (the teachers) become accountable “via external assessments and accountability measures” [Verger et al., (2019), p.220]. Barroso (2018), regarding the ‘new public managerialism’ and neo-liberalistic regulation, refers to four levels of educational systems regulation: transnational, allocated to the international programs of students’ assessment and processes of control results-focused; national, responsible for the procedures control; municipal, labouring the administrative and financial autonomy; schools, assembled by the curricular and pedagogical autonomy.

The centralisation and the tendency to follow bureaucratic rules limit the capacity of schools to address their immediate goals and changes (Kılıçoğlu and Kılıçoğlu, 2021). Thus, despite the growing ideology of autonomy for education, “deregulation emphasising increased local autonomy seems to accommodate mechanisms which, paradoxically, tend to increase central control” and “schools and professionals are becoming more accountable for providing education and achieving results” (Helgøy et al., 2007). Accountability policies generate mechanisms of institutional re-regulation after decentralisation and deregulation. A post-bureaucratic state reassumes control through digital platforms and devices aiming for uniformity, standardisation, objectivity, measurement, and surveillance, resulting in hyper-rationalisation (Lima, 2021).

Principals’ autonomy in Portugal is limited and one of the lowest in the OECD (2018). Portuguese schools operate in collegial bodies and are roled by a “type of leadership still excessively focused on bureaucratic aspects, and equivalent - and scarce -, levels of autonomy” [Tintoré et al., (2022), p.14]. In 2018, the transference of education competencies to the municipalities began, and reform to concede curricular flexibility and autonomy for the schools occurred. This autonomy is limited once the state exercises control of the leading national curriculum through ‘essential learnings’ and a national student profile. Re-regulation is also exercised through national tests and schools’ rankings, mechanisms of digital control, and external evaluations. Like in Europe, where the bureaucratic, professional model has developed into hybrid schemes (Maroy, 2009; Bellei and Munoz, 2021), re-regulation assumed both aspects of Portugal’s quasi-market and evaluative state model.

The accountability of the school principals, limited schools’ and teachers’ autonomy, and hierarchical and bureaucratic education system can be precursory of organisational hypocrisy (Kılıçoğlu and Kılıçoğlu, 2021). Hence, internal accountability should precede external accountability if lasting improvement in student achievement is the goal (Hargreaves and Fullan, 2012; Fullan et al., 2015). Harvesting the schools’ success requires building a collaborative culture that combines individual responsibility, collective expectations, and corrective actions highlighted by internal accountability. Schools’ self-evaluation can act as the plumb line of the system that seeks a balance

between accountability and autonomy within the teaching and learning process and school responsiveness to educational challenges. Self-evaluation allows either an increased level of freedom for teachers and schools to implement their development or an increased level of responsibility for their judgments on the quality of teaching and learning (Brady, 2019). Self-evaluation is a social force for promoting collective responsibility. Accountability must emphasise building more inclusive, equitable, and good-quality education systems and practices instead of blaming individuals (UNESCO, 2017). Schools should be encouraged to self-evaluate to complement the external evaluation and develop targeted school improvement plans (Brown et al., 2018; Simeonova et al., 2020).

## *2.2 Innovation hand in hand with teachers and school leaders*

The worldwide need for a more responsive school to societal changes demands schools as places where everyone should be considered a learner and where interactive, mutually supportive relationships help learners progress. The collective quest for sustainable and inclusive human and social development justifies the growing call for inclusive and accountable educational policies (Walters and Watters, 2017). Ensuring inclusive, equitable, good-quality education is a collective enterprise in which all actors concerted effort to meet responsibilities [UNESCO, (2017), pp.6–7]. Successful schools will be places where people want to work, realise good ideas, and collaborate to spur innovation and sustain the drive to innovate (Schleicher, 2018).

Mincu (2022) defends that any cultural change imposed from above or abroad may fail if the centralised system and school actors are not allowed to engage in an adequately supported cultural adaptation exercise. The same author adds that, without leadership, individual teachers may act as a loosely connected group without the vision and motivation to produce change. A new component of the professional identity emphasises the perception of teachers' role as pedagogical innovators, that is, the need for skills and competencies to manage innovations and change processes (Avidov-Ungar and Forkosh-Baruch, 2018). Teachers must be challenged to face technological innovations and new media, promote classroom-based research to help them personalise learning experiences, and deal with increasing diversity (Schleicher, 2018) to support a more inclusive and democratic school.

The work of the principal is far too overwhelming in the face of the demands required to cultivate a school willing to adjust to prepare students for their futures (O'Shea, 2021). Leadership appears as the ability to mobilise and inspire purposeful and interdependent action within the school through a shared vision. Aligned school visions empower the whole organisation and assure its responsiveness and continuous adaptation. The literature vastly documents the connection between empowering leadership and innovative behaviour due to the effects on teacher psychological empowerment (Zhu et al., 2019).

Innovation is crucial for school transformation and, according to Fuad et al. (2022), is the support given to teachers from the government, the community, peers, and leaders that allows innovation. The same authors defend that school innovation-oriented cultures depend on individual personality, interaction, collaboration and teamwork, support, and teacher leadership. Distributed leadership is central to school transformation because it impacts organisational commitment (Devos et al., 2014); teachers' efficacy due to job satisfaction and a trust culture (Atik and Celik, 2020); collective and collaborative

processes of knowledge-sharing (Fuad et al., 2022), decision making, and the trial and refinement of practices (Brown et al., 2020). Chen et al. (2016) and Bak et al. (2022) found associations between transformational leadership and organisational innovation or innovative work behaviour. Innovation-oriented organisations depend on increasing intellectual capital through leadership strategy (Sujudi et al., 2020). Additionally, innovative behaviour and inquiry habits of mind depend on the quality of relationships between the school leaders and teachers (Vermeulen et al., 2020) and the school climates (Wang, 2019). Teachers' professional practices may be improved by encouraging teacher leadership and collaboration (Pan and Chen, 2021) because knowledge exchange enables collective creativity for innovative impulses (Müller, 2021). Therefore, leadership is crucial for inducing and diffusing innovation within an organisation and, according to Mincu (2022), is the starting point for the school's transformation.

### 3 Methodology

This study followed a multi-stage methodology in which preliminary qualitative research supported the quantitative approach (Edwards, 2010). The documental corpus under analysis included 60 Portuguese school clusters' external evaluation reports produced by the Inspectorate services. These reports were elaborated between 2018 and 2021 according to a framework developed for the third cycle of external evaluation that includes four domains: school' self-evaluation, leadership and management, providing educative service, and results. The Portuguese Ministerial Platform of Basic and Secondary Education Statistics made the data available. Inspectorate services are a statual autonomous organism that assures the quality of the educational system. Portuguese law determines the inspections' role of account provision to promote improvements, ensure efficacy and efficiency, and leverage system and schools' accountability. The school inspection process evaluates the whole organisation, not merely the students' outcomes.

The sample assumed a saturated sampling procedure, considering all the external evaluation activity provided in the referenced period. It included every public school's cluster or not grouped schools and excluded reports from the pilot phase of this new cycle of external evaluation and professional, artistic, and private schools. The study considers the following hypotheses regarding the Inspectorate intervention:

Hypothesis 1 There are causal relations between the strengths identified and each external evaluation domain.

Hypothesis 2 There are causal relations between the improvement areas identified and each external evaluation domain.

Hypothesis 3 Innovation is crucial in the schools' external evaluation process.

Innovation, for Hypothesis 3 validation purposes, considered the descriptors assembled in the Portuguese Inspectorate framework of schools' evaluation:

- 1 fostering project development and innovative solutions and its efficacy evaluation in the leadership and management domain
- 2 initiatives of curricular and pedagogical innovation and definition of learning supportive interventions for inclusion in providing educational service domain.

### 3.1 Data collection

The cross-sectional study has underlying an *ex post facto* plan and a descriptive and causal-comparative method. We intend to describe the improvement areas and strengths observed by the Inspectorate that report Portuguese schools' action and performance. Then, these data were mobilised to a causal-comparative analysis to understand causal-effect associations between the improvement areas or strengths observed and the evaluation provided by the Inspectorate.

The data obtained restrictedly arise from the executive summary of the reports concerning improvement areas and strengths observed by the Inspectorate. The content analysis used an open and flexible referential for data reduction purposes with four theme blocks: self-evaluation, leadership and management, providing educative service, and results. The categories concerning each theme block were not predefined. They emerged from the systematic content analysis and regarded the criteria of mutual exclusion, homogeneity, exhaustivity, pertinency, objectivity, and fidelity (Bardin, 2009). The exploratory process of data enumeration considered:

- 1 the presence or absence of the references
- 2 direction, considered favourable when referring to strength and unfavourable when representing an improvement area.

Each category identified was considered a construct and was converted to a qualitative dichotomic variable used in the quantitative study of the hypotheses.

### 3.2 Measurements and data analysis

Firstly, data from the external evaluation reports regarding the global qualitative appreciation made by the Inspectorate were statistically described through frequency, median, and interquartile range.

Secondly, the Wilcoxon Mann-Whitney U test for two unrelated samples was applied to understand if there is a statistically significant effect of the observation of a construct – a strength or an improvement area – on the qualitative appreciation of the domain provided by the inspectorate. The null hypothesis tested was  $H_0$ : the two populations (schools with observed/non-observed construct) do not differ on the qualitative appreciation made by the Inspectorate. This analysis considered constructs tabulated in the external evaluation reports with minimal frequencies of 10%. This analysis was complemented with a correlational study. The rank biserial correlation provided correlation values between the dichotomous and ordinal variables, statistically significant according to the Mann-Whitney U test, to realise the strength of the association and its direction.

## 4 Results

### 4.1 Schools' organisation and practices

Table 1 describes the sample regarding the external evaluation of schools provided by the Portuguese Inspectorate. Among the 60 schools and school clusters studied leadership and management was the most favourable external evaluation domain, with 31

appreciations of very good and 25 of good ( $N = 60$ ;  $Med = 4$ ). Conversely, the self-evaluation domain evidenced the lowest appreciation, with 32 good schools followed by 16 sufficient schools ( $N = 60$ ;  $Med = 3$ ). Most schools exhibit good evaluations regarding the educative service provided and school results domains, 43 ( $N = 60$ ,  $Med = 3$ ) and 46 ( $N = 60$ ,  $Med = 3$ ), respectively.

The schools' external evaluation reports analysis concerning strengths and improvement areas are presented in Figures 1 and 2. Regarding the strengths' self-evaluation domain, consistency is the most valuable parameter, with a frequency of 51. Conversely, the improvement areas with higher scores of frequencies were deepening self-evaluation practices (34 references) and centrality to the teaching and learning practices (29 references). Reflection practices (around 20%) and a school community participated process (25%) appear with approximate prevalence regarding strengths and improvement areas. A dichotomisation of the Portuguese schools seems to exist regarding their position concerning reflection and participation in self-evaluation. According to the Inspectorate, school self-evaluation must be improved and tuned to provide higher support in decision-making and foster quality. A greater emphasis is being placed on the self-evaluation process's role in providing quality education, which appears as an intrinsic part of a school's development plan (Brown et al., 2018; Fullan et al., 2015).

**Table 1** External evaluation of schools by domain ( $N = 60$ )

<i>External evaluation domains</i>	<i>Appreciation</i>	<i>Frequency</i>	<i>Median</i>	<i>IQQ</i>
Self-evaluation	Insufficient	2 (3.3%)	3	1
	Sufficient	16 (26.7%)		
	Good	32 (53.3%)		
	Very Good	10 (16.7%)		
Leadership and Management	Insufficient	1 (1.6%)	4	1
	Sufficient	3 (5.0%)		
	Good	25 (41.7%)		
	Very Good	31 (51.7%)		
Providing Educational Service	Insufficient	---	3	0
	Sufficient	4 (6.6%)		
	Good	43 (71.7%)		
	Very Good	13 (21.7%)		
Results	Insufficient	---	3	0
	Sufficient	5 (8.3%)		
	Good	46 (76.7%)		
	Very Good	9 (15.0%)		

Note: IQQ – interquartile range.

Regarding the leadership and management domain, the prevailing strengths observed in schools were partnership networks with institutions from the community (39 references), shared and mobilising leadership (31 references), strategic vision (29 references), and organisational involvement climate (28 references). Focus on the teachers' training and communication within the school are punctually considered strengths and cited as needing improvement in 15 and 10 schools, respectively. Still, concerning improvement



areas, the strategic vision (31 references) is considered critical in more than half of the schools. However, supervision and intervention practices and improving teachers, students, and parents' participation in the school are hardly referred to.

In the eyes of the Inspectorate, a school culture (7 references) or a school vision (3 references) are not critical in most Portuguese schools. School culture is the distinctive and idiosyncratic way of working in an organisation regarding the school vision, and according to Fuad et al. (2022), to bring organisational change and impact on the educational context, it asserts a causal relationship between the role of the leader and organisational learning. The Inspectorate findings align with seven key elements that promote students' academic achievement referred to in the literature:

- 1 distributed leadership (Leithwood et al., 2004; Hargreaves, 2007; Khalifa et al., 2016)
- 2 strategic vision (Morrison, 2005; Ho and Lee, 2016)
- 3 organisational involvement climate (Day, 2017; Yuan et al., 2018)
- 4 communication (Juwono and Harly, 2017)
- 5 focus teachers' capacity building and school capacity (De Matthews, 2015; Park and Ham, 2016; Yakavets et al., 2017; Bellibaş et al., 2020)
- 6 community connections (Portz, 2021)
- 7 common school culture and school vision (Khalifa et al., 2016; Day, 2017; Gil et al., 2018; Yuan et al., 2018; Bellibaş et al., 2020; Sujudi et al., 2020).

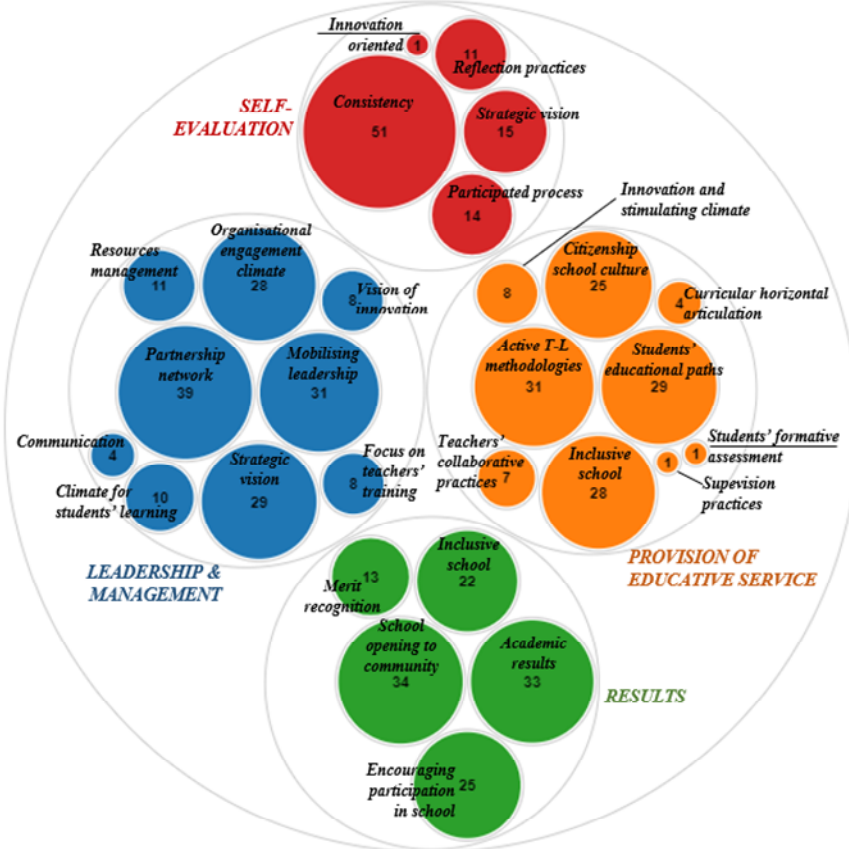
In Portuguese schools, the main problematic key factors are strategic vision and mobilising middle leadership.

Regarding the domain of providing educative service, the most observed strengths in schools were active teaching and learning methodologies (31 references), monitoring of students' educational paths (29 references), commitment to an inclusive school (28 references), and a citizenship school culture (25 references). In contrast, students' formative assessment, teachers' supervision practices, horizontal curricular articulation, and teachers' collaboration practices are pointily considered the school's strengths. Concerning improvement areas, the most observed schools' practices were investing in students' formative assessment (38 references), the need for classroom supervision practices (37 references), the need for active approaches to the teaching and learning process (29 references), and the need for vertical (29 references) and horizontal (21 references) curricular articulation. On the other hand, the articulation between schools' strategic documents and care for inclusive environments are practices restricted to a small number of schools. The external evaluation orientations in at least half of the schools demand interventions regarding integrative approaches involving organisational, pedagogical, and cultural aspects. The schools' organisational changes should be oriented by a "well-established and articulated institutional mission" [Augustine-Shaw et al., (2017), p.26]. The changes require strong school leaders to articulate a more cohesive vision that supports developing and sustaining culturally responsive teaching (Khalifa et al., 2016).

Finally, concerning the results' domain, the school opening to the community (34 references), academic results (33 references), encouraging school participation (25 references), and fostering an inclusive school (22 references) represent the overall

strengths profile of the Portuguese schools. The improvement areas with higher frequencies were providing an inclusive education (23 references) and improving students' results (21 references). Problems regarding monitoring students' school paths, merit incentives, and improving teaching practices are scarce. These findings show that schools are moving at different velocities to face contextual problems regarding students' performance and inclusive education.

**Figure 1** Distribution and frequency of schools' strengths by evaluation domain (n = 60)  
(see online version for colours)



Regarding innovation, the schools' indicators provided by external evaluation represent only 3.0% of total observations, 3.3% (17 references) correspond to strengths, and 2.5% (11 references) are improvement areas. The strengths identified correspond to the existence of innovation-oriented self-evaluation (1 reference), leadership vision of innovation (8 references), and innovative and stimulating climate (8 references). The minor orientations for schools' change action refer to innovative solutions (7 references) and promoting innovative practices (4 references). Hence, the Portuguese Inspectorate appears as an agent that operates at the conformity level of action, relegating innovation to a secondary role. In this alignment, Madeira and Duarte (2018) reinforce the need for an inspection oriented to innovation and change that assumes a transparent, dialogic, flexible, and adaptive feature and focuses on the teacher role, the guarantor of innovation.

Donaldson (2013) argues that “inspection can be seen as an inhibitor of innovation, giving approval to what it values and taking responsibility away from the school” (p.5).

**Figure 2** Distribution and frequency of improvement areas by external evaluation domain (n = 60) (see online version for colours)



#### 4.2 Predictors of the schools' external evaluation

Table 2 presents the results of the Mann-Whitney U test applied to examine Hypotheses 1 to 3 that a causal relationship exists between the reported strengths and improvement areas and the appreciation provided to each domain of schools' evaluation by the Inspectorate. This analysis compared schools with the tabulated items or variables (Figure 2 and Figure 3) with the ones for which the Inspectorate did not report it. Of 72 tests performed, only 16 became statistically significant (Table 2). Additionally, none of the 12 analyses referring to the effect of innovation on schools' external evaluation was statistically significant (Table 3). These analyses concern the vision of innovation, innovative solutions, and an innovative and stimulating climate (Mann-Whitney tests with  $p\text{-value} > .05$ ). The short observations of the Inspectorate and the lack of influence on the appreciation of schools point to a faded potential for influence schools concerning innovation. Hence, hypothesis 3 is not supported by data. An essential role of an external

review is the renewal of the school's action. At schools, innovation corresponds to a mutational force that depends on the cultures established in schools and the societal forces of change (Serra et al., 2024), which suggests that culture is an essential determinant of organisational innovation (Fuad et al., 2022). The educational culture requires high quality, continuous improvement, and innovation (Donaldson, 2013). It is crucial to catalyse teachers' aptitude for innovation related to innovative activity in reflective-evaluative terms (Tyunnikov, 2017). The innovative process should address systemic approaches to change in teachers' practice (Avidov-Ungar and Forkosh-Baruch, 2018). Thus, quality needs to be construed as responsibility (Mufic, 2022) and demands information and outcomes to support leaders' skilful and reliable work in constructive leadership (Zamir, 2019).

The results of the Mann-Whitney test for causal relationships between the variables, with  $p\text{-value} > .05$ , enounce that the following strengths observed can not explain the Inspectorate schools' evaluation: self-evaluation consistency, shared and mobilising leadership, organisational involvement climate, inclusive school, and teaching and learning active methodologies (Table 2). In the same way, the following improvement areas are not related to the schools' external evaluation: strategic vision, curricular vertical and horizontal articulation, classroom supervision, student formative assessment practices, and classroom practice improvement (Table 2).

Concerning self-evaluation, only two variables significantly influence external evaluation appreciation: strategic vision ( $U = 306.000$ ,  $p = .025$ ) and mobilising middle leadership ( $U = 306.000$ ,  $p = .025$ ). Once both constructs were addressed in the leadership and management domain, they represent indirect effects. The rank-biserial correlation identified a significant relationship between both variables (Table 4). The correlation concerning strategic vision, a strength, is positive but weak,  $r_{rb}(60) = .305$ ,  $p = .018$  (Bartz, 1999). The correlation regarding the mobilisation of middle leadership, an improvement area, is negative, as expected, and weak,  $r_{rb}(60) = -.377$ ,  $p = .003$ . None of the constructs identified by the Inspectorate regarding the domain of self-evaluation evidence a significant direct effect on the domains' global appreciation. This lack of influence may produce diminished meaningfulness of feedback and may decrease receptiveness to the "formative feedback that schools need to improve their practices" [OECD, (2020b), p.4]. For the school evaluation to be practical, schools must adopt a responsible agency and support action on their judgments about quality (McNamara and O'Hara, 2008). Confusing, false, or unreliable evaluations can produce non-credibility and generate a pointless evaluation (Zamir, 2019).

The leadership and management domain registered three statistically significant associations regarding an effect on external evaluation schools' appreciation, namely:

- 1 strategic leadership vision, a strength that represents a direct, positive, and moderate effect ( $U = 229.000$ ,  $p < .001$ ;  $r_{rb} = .467$ ,  $p < .001$ )
- 2 mobilising middle leaders, an improvement area, which evidence a direct, negative, and moderate effect ( $U = 134.000$ ,  $p < .001$ ;  $r_{rb} = -.569$ ,  $p < .001$ )
- 3 compromise with building an inclusive school, a strength, which expressed an indirect, negative, and weak effect ( $U = 308.000$ ,  $p < .020$ ;  $r_{rb} = -.257$ ,  $p = .048$ ).

**Table 2** Results of the Mann-Whitney U test for causal relationships between the research variables and the Inspectorate evaluation

	External evaluation domains					
	Self-evaluation		Leadership and management		Providing educative service	
	U	p	U	p	U	p
Self-evaluation consistency (S)	172.500	.194	227.000	.954	209.500	.599
Teaching and learning-centredness self-evaluation (IA)	403.500	.454	392.000	.339	847.000	.482
Deepening practices of self-evaluation (IA)	419.000	.705	413.000	.626	385.500	.285
Shared and mobilising leadership (S)	403.500	.454	421.000	.635	440.000	.859
Organisational involvement climate (S)	342.000	.084	336.000	.062	345.000	.054
Strategic vision (S)	306.000*	.025	229.000***	<.001	287.000**	.003
Mobilisation of middle leaders (IA)	188.000**	.003	134.000***	<.001	186.000***	<.001
Strategic vision (IA)	405.000	.464	365.000	.157	412.500	.482
Inclusive school (S)	383.000	.289	308.000*	.020	363.500	.112
Teaching and learning active methodologies (S)	407.000	.504	436.000	.841	415.000	.535
Teaching and learning active methodologies (IA)	429.000	.757	350.000	.102	294.000**	.004
Curricular vertical articulation (IA)	403.500	.454	392.000	.339	384.000	.219
Curricular horizontal articulation (IA)	400.500	.878	362.000	.407	319.500	.077
Classroom supervision (IA)	414.500	.854	339.000	.139	387.000	.458
Student formative assessment practices (IA)	340.500	.239	301.000	.058	336.000	.149
Academic results improvement (S)	397.500	.432	373.000	.225	309.500**	.010
Academic results improvement (IA)	391.500	.759	404.000	.924	352.000	.258
Classroom practices improvement (IA)	141.000	.569	159.000	.934	133.000	.365
					216.000	.705
					779.500*	.035
					341.000*	.041
					448.500	.984
					390.000	.245
					288.000**	.002
					243.500*	.014
					372.500	.121
					425.500	.652
					445.000	.952
					339.000*	.029
					423.000	.596
					344.000	.169
					414.500	.821
					367.000	.373
					317.000**	.010
					293.000*	.015
					144.500	.559

Notes: \*p<.05; \*\*p<.01; \*\*\*p<.001;  
S – strength; IA – improvement area



**Table 4** Results of the Rank-biserial correlation for the model research variables

	Self-evaluation		Leadership and management		Providing educative service		Results	
	<i>r<sub>rb</sub></i>	<i>p</i>	<i>r<sub>rb</sub></i>	<i>P</i>	<i>r<sub>rb</sub></i>	<i>p</i>	<i>r<sub>rb</sub></i>	<i>p</i>
Teaching-learning centredness self-evaluation (IA)							-.274*	.034
Deepening practices of self-evaluation (IA)							.266*	.040
Strategic vision (S)	.305*	.018	.467**	<.001	.389**	.002	.403**	.001
Mobilising middle leadership (IA)	-.377**	.003	-.569**	<.001	-.472**	<.001	-.320*	.013
Inclusive school (S)			-.257*	.048				
Teaching-learning active methodologies (IA)					-.379**	.003	-.285*	.027
Students' academic results (S)					.331**	.010	.336**	.009
Students' academic results (IA)							-.321*	.012

Notes: \*p<.05; \*\*p<.01; \*\*\*p<.001

S – strength; IA – improvement area

This last construct represents a controversial correlation, considering it is a strength and the direction obtained. However, the controversy is attenuated once the construct of inclusive school corresponds to an item belonging to a different domain (providing educative service). Still, it concerns a dimension crucial for promoting a more democratic and responsive school, a premise highlighted by the educational Portuguese political orientation. The former constructs, strategic vision and mobilising leadership are determinants of school effectiveness and improvement (Pina et al., 2015; Chen et al., 2016; Hitt and Tucker, 2016; Sujudi et al., 2020; Anselmus Dami et al., 2022; Rechsteiner et al., 2022; Villamor et al., 2022). This influence on the school quality justifies the moderate relationship of the constructs with the Inspectorate appreciation.

Four significant correlations were identified regarding the domain of providing educative service. The construct teaching and learning active methodologies evidence a direct and weak influence on the Inspectorate evaluation ( $U = 294.000$ ,  $p = .004$ ), but negative because it is an improvement area ( $r_{rb} = -.379$ ,  $p = .003$ ). Indirect, positive, and weak effects were established, involving the strategic leadership vision ( $U = 287.000$ ,  $p = .003$ ;  $r_{rb} = .389$ ,  $p = .002$ ) and students' academic results ( $U = 309.500$ ,  $p = .010$ ;  $r_{rb} = .331$ ,  $p = .010$ ), both tabulated in external evaluation reports as strengths. Additionally, an indirect, negative, and moderate effect on Inspectorate appreciation was registered regarding the improvement area, mobilising middle leaders ( $U = 186.000$ ,  $p < .001$ ;  $r_{rb} = -.472$ ,  $p < .001$ ). Therefore, the domain providing educative service appears marked by a triangle of interdomain cross-correlations involving teaching practices related to active methodologies, leaders' strategic vision and mobilisation, and students' academic results. This articulated perspective of an agentic organisation is aligned with Hanberger et al. (2016) viewpoint, that states that "school development conceived as improved teaching and school culture [on par with leadership] appears as a more valid representation of school development" (p.362). This representation can be used as mainstream feedback scrambling to be projected into the everyday lives of schools.

The external evaluation of the schools' results domain evidences a causal association with seven constructs. Students' academic results aligned with national standards, either observed as a strength and as an improvement area, represent direct and weak effects, respectively, with a positive ( $U = 317.000$ ,  $p = .010$ ;  $r_{rb} = .336$ ,  $p = .009$ ) and negative ( $U = 293.000$ ,  $p = .015$ ;  $r_{rb} = -.321$ ,  $p = .012$ ) direction. The strength strategic vision registered an indirect, positive, and moderate association with the appreciation conceded to the results' domain by the inspectorate ( $U = 288.000$ ,  $p = .002$ ;  $r_{rb} = .403$ ,  $p = .001$ ). Finally, representing indirect and weak effects regarding improvement areas, we signal the constructs: teaching and learning-centredness school self-evaluation ( $U = 779.500$ ,  $p = .035$ ;  $r_{rb} = -.274$ ,  $p = .034$ ); deepening self-evaluation practices ( $U = 341.000$ ,  $p = .041$ ;  $r_{rb} = .226$ ,  $p = .040$ ); mobilising middle leaders ( $U = 243.500$ ,  $p = .014$ ;  $r_{rb} = -.320$ ,  $p = .013$ ); teaching and learning active methodologies ( $U = 339.000$ ;  $p = .029$ ;  $r_{rb} = -.285$ ,  $p = .027$ ). Theoretically, the direction of the construct deepening self-evaluation practices represents an inconsistent correlation with the Inspectorate appreciation once it is positive and still an area of improvement.

Hence, mobilising leadership, school vision, and teaching and learning active methodologies appear as constructs that can predict external evaluations regarding providing educative service and school results domains. It addresses two logics of action. The former regards school organisation and leadership practices which, when they assume a transformational orientation, are learning-oriented and distributed evidence



potential to impact the school performance (Chen et al., 2016; Yuan et al., 2018; Zheng et al., 2019; Pan and Chen, 2021). The other transfers the onus of the student's success and the school performance to the teacher, corresponding to a growing realisation that the teacher is the key innovation gatekeeper, demanding inspectorates to adopt approaches that will relate more directly to the classroom (Donaldson, 2013).

## **5 Discussion**

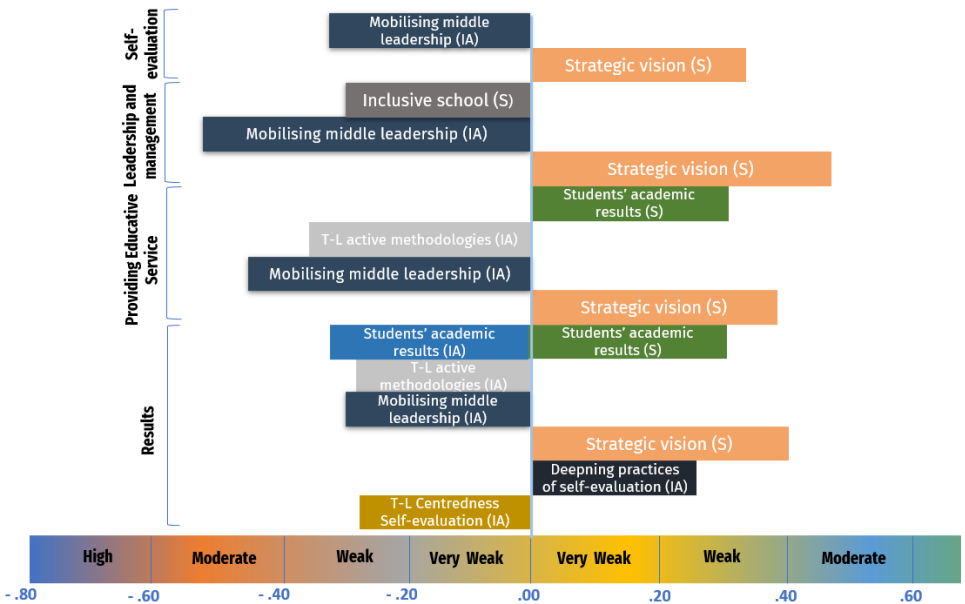
The ultimate intended function of evaluation is to support the school's development (Hanberger et al., 2016), and an "evaluative culture in an organisation is an unconditional requirement for quality assurance in education" [Zamir, (2019), p.409]. Accountability policies should support "school leaders in their daily decisions to initiate and manage school improvement by making sense of policies related to curriculum and pedagogy, data monitoring, resource allocation, and performance management" [Constantinides, (2022), p.176]. According to assumptions of the 'polymeric model' of school evaluation introduced by Zamir (2019), "the credible and non-credible evaluator's continuum sets up opposite poles of desirable to undesirable functioning" (p.407) within the schools. Therefore, coherence, reliability, and trustworthiness in external evaluations are prerequisites. This study shed some light on the consistency and reliability of the schools' external evaluation apparatus regarding the strengths and improvement areas and then identified the related predictors.

Figure 3 summarises the global 'portrait' of Portuguese schools, which were the object of the external evaluation during the third cycle of the schools' evaluation, perceived by the Inspectorate. Then, the validity of Hypotheses 1 and 2 is restricted to ten constructs, representing direct and indirect effects and two controversial correlations. The findings indicate that a solid strategic vision and a weak mobilisation of middle leaders are predictors in evaluating all four domains defined for the schools' evaluation: school self-evaluation, leadership and management, providing educative service, and results. These outcomes align with those obtained by Espuny et al. (2020) regarding the Portuguese educational system, resembling the principal's problems in finding influential middle leaders. The findings suggest that principals should invest in defining a compelling vision for the school and harvesting a shared, distributive, and mobilising middle leadership that may catalyse the school's strategic project. Transformational leadership describes the vision and mission and conveys how to achieve these goals through consistent symbolic actions and words that conform with the vision (Yuan et al., 2018). Distributed leadership and a compelling vision that produces teachers' engagement are conducive to a more positive school environment that supports equity and inclusion (De Matthews, 2015), justifying the transversal impact in the four domains of external evaluation. Thus, solid, vision-focused leadership provides motivation and orientation to meet organisational goals. School principals should try to prosecute articulating a vision, fostering the acceptance of the group goals, and creating high-performance expectations (Leithwood et al., 2004) to take action to enhance the students' and the schools' performance, which also fosters a performance-oriented school culture (Hanberger et al., 2016).

Results and providing educative service are external evaluation domains that directly express education quality, which has been drifting from focusing mainly on results to a whole school system evaluation. Several predictors were identified regarding the results

domain: teaching-learning centredness self-evaluation, deepening self-evaluation practices, teaching and learning active methodologies, all improvement areas, and academic results, either a strength or an improvement area. All these predictors directly reflect the classroom and the teaching and learning process. These findings suggest that a strategy for developing social capital must be sustained in “building individual and collective efficacy and creating links of lateral accountability that push and pull team members to get better at their practice” [Fullan et al., (2015), p.8]. Two predictors identified in our study support this perspective: teaching and learning active methodologies and academic results. The findings regarding the predictors of teaching-learning centredness self-evaluation and deepening self-evaluation practices are aligned with the idea suggested by Kardell (2023) that a high degree of innovation requires a high level of error management culture. Constantly improving and refining instructional practice through accountability can improve student learning (Fullan et al., 2015).

**Figure 3** Global portrait of Portuguese schools’ evaluation predictors ( $p < .05$ ) (see online version for colours)



Notes: S – strength; IA – improvement area

Concerning the external evaluation domain of leadership and management, the variable compromise with building an inclusive school is the only predictor identified. This finding suggests that “culturally responsive leadership activities (by either an individual or distributive leadership activity) should consistently contribute to culturally responsive teaching and curricula” and “this will ultimately help all children reach their fullest potential [Khalifa et al., (2016), p.25, p.26]. The domain school self-evaluation could not be related to any explicatory variable. This finding may be related to the fact that self-evaluation is yet a fragile domain in the schools’ organisation and is, at a greater or lesser

level, scrambling to integrate it into everyday school life (McNamara and O'Hara, 2008; Serra et al., 2023).

Variables related to the innovation also could not be related to the evaluations provided by the Inspectorate. These findings might reveal the difficulties of conceiving a common and clear understanding of educational innovation, an aspect also assembled by Latorre-Coscolluela et al. (2023). Hence, in Portugal, the function of inspections identified at the Starter Paper on Inspection and Innovation produced in the Bratislava meeting, 'preserver/creator of the space for innovation' (Donaldson, 2013), appears erased.

The credible evaluations also provide an opportunity to offer feedback to improve the schools' performance (Zamir, 2019) and orientation for regulation and building improvement plans. The diminished considerations regarding innovation cannot fulfil the regulation purposes: to foster innovative environments associated with more frequent teacher collaboration and exchange (Blömeke et al., 2021), interaction and involvement (Nemeržitski et al., 2013), and the generation of learning environments (Gil et al., 2018); to highlight the pivotal role of principal empowering leadership in fostering teacher innovative behaviour (Gkorezis, 2016). Portugal's educational policies subscribe to transnational narratives on innovation, and the Portuguese Inspectorate, since 2018, has been using a framework with four descriptors concerning innovation. Two causes can be advocated: difficulties in identifying it and reuniting evidence on schools' innovation. Just like in other educational systems, in Portugal, the focus seems to be on uniformity and standardisation (and ultimately, leading to compliance) rather than fostering innovation and giving attention to local contexts based on the assumed agency of teachers and school partners (Cochran-Smith, 2021).

Regarding self-evaluation, the absence of predictors that can explain external evaluation direction, even though the small dispersion of indicators observed between schools – five strengths and four improvement areas – can generate incomprehension among the school community. False, confusing, and unreliable evaluations are three-flawed frames that can lead to misvaluation and mistrust in the system (Zamir, 2019). The importance of external evaluation in producing a constructive impact on schools' action reorientation, especially in self-evaluation, the mechanism of internal and continuous regulation, can become confused. Schools' internal evaluation has been identified in the literature as an endeavour for schools' quality and improvement (Albuquerque et al., 2020; Brown et al., 2018; Cochran-Smith, 2021; Fullan et al., 2015; OECD, 2020b; Zamir, 2019).

### *5.1 Limitations and future research*

This study reflects the perception of the Inspectorate, which was not crossed with the schools' self-evaluation alignment, a crucial dimension of schools' evaluation. Additionally, the study is restricted to the inspectorate executive summary. Future research should go deeper and include the perspective of school self-evaluation and the perceptions of the school staff towards the feedback provided by the Inspectorate. This interconnected approach might enrich the research about the Portuguese schools' effective regulation processes and the innovation role in school transformation.

This research detected predictive effects of constructs regarding strength and improvement areas. Still, it lacks an analysis of the combined impact of these constructs

in the evaluation provided by the Inspectorate. Hence, this study appears as a starting point for deeper approaches in line or widening the scope of it.

## 6 Conclusions

School regulatory processes concerning external evaluation and self-evaluation can bear an evaluative culture that may support schools' higher responsiveness to societal challenges, improve students learning, promote inclusion, foster high performance, and assure continuous improvement. This study can provide general assumptions regarding the contribution of external evaluation to the regulation of the Portuguese educational system. Four key elements characterise the organisations concerning the school practices perceived by the Inspectorate. Four rational lines concerning the school practices perceived by the Inspectorate can be utterances regarding organisations

First, several key elements may be associated with each domain to characterise the organisations concerning the school practices. Regarding self-evaluation, Portuguese schools exhibit consistent practices but need to develop a strategic vision, deepen evaluation practices, and give the teaching and learning process centrality. Leadership and management is the most robust domain, being characterised by three key elements: shared and mobilising leadership, organisational engagement climate, and partnership networks. The strategic vision is a strength in some schools but problematic in others. The mobilisation of middle leaders arises as a feature that must be improved. Concerning providing educative service domain: citizenship is a strength; nurturing an inclusive school and teaching and learning active methodologies denounces ambivalence; students' formative assessment, curricular horizontal and vertical articulation, and classroom supervision prevail as improvement areas. Concerning the domain of the results, schools' opening to the community is often a strength. Still, academic results and promoting an inclusive school are ambivalent features of the schools. Paradoxical features demarcate the Inspectorate's discourse. Despite leadership being a strength, middle leadership evidences weaknesses. Regardless of the leadership merit, it does not positively impact the completeness of the school's self-evaluation process and, in half of the cases, the teachers' practices and the student's academic results. These controversial aspects of the external evaluation call into question the added value of the leadership or its focus and the very role of the external evaluation. Inspectorate control may assume a legitimising purpose in the Portuguese educational system.

Second, innovation appears as a marginal dimension of the school's reality without impacting its evaluation. In Portugal, the external evaluation focuses on uniformity, standardisation, and compliance rather than nurturing innovation as a tool for schools' contextual problem resolution and fostering teachers' curricular agency.

Third, concerning the school's external evaluation, we have identified eight main predictors of its global appreciation, even though other subsidiary constructs may contribute when considering each specific school context individually. The findings suggest that strategic vision and shared and mobilising leadership are predictors of all four domains – self-evaluation, leadership and management, providing educative service, and results. Students' academic results and the need for a teaching and learning-centredness self-evaluation, deepening practices of self-evaluation, and teaching and learning active methodologies are predictors of results. The need to improve teaching and learning active methodologies and academic results predict external evaluation grades

concerning the providing educative service domain. At last, commitment to building an inclusive school influences leadership and management Inspectorate appreciation. No predictors for features regarding self-evaluation and innovation were observed. In the eyes of the Inspectorate, Portuguese schools value inclusion and citizenship approaches to respond to students' diversity, even though schools must deepen teaching and learning active methodologies and reconfigure the middle leadership. To support the school transformation, middle leadership needs to evolve and become more structured, active, constructive, reflexive, creative, and empowering, provide for capacity building, and embrace innovation.

This study enriches the literature regarding the difficulties of the Inspectorate in regulating schools' innovation. It provides an orientation to policymakers, inspectors, and schools regarding the problem of building more impactful accountability, a social force for sustained improvement. Regarding school management, principals must focus on improving the school's responsiveness and providing inclusion through self-evaluation and innovation-oriented cultures. If improvement in all students' learning is the goal, building school cultures sustained in self-evaluation provides increased freedom for leaders and teachers' leadership to spur innovation and deal with the risk.

## References

- Albuquerque, P.D., Ferreira, A.G. and Barreira, C.M.F. (2020) 'Interdependência entre domínios na avaliação externa para a melhoria dos 'resultados' em duas organizações escolares', *Revista Brasileira de Educação*, Vol. 25, pp.1–24, DOI: 10.1590/s1413-24782020250022.
- Anselmus Dami, Z. et al. (2022) 'Principal self-efficacy for instructional leadership in the perspective of principal strengthening training: work engagement, job satisfaction and motivation to leave', *Cogent Education*, Vol. 9, No. 1, DOI: 10.1080/2331186X.2022.2064407.
- Atik, S. and Celik, O.T. (2020) 'An investigation of the relationship between school principals' empowering leadership style and teachers' job satisfaction: the role of trust and psychological empowerment', *International Online Journal of Educational Sciences*, Vol. 12, No. 3, pp.177–193, DOI: 10.15345/iojes.2020.03.014.
- Augustine-Shaw, D., Hachiya, R.F. and Miller, T.N. (2017) *Leadership for change, Quandaries of School Leadership: Voices from Principals in the Field*, DOI: 10.1007/978-3-319-59120-9\_12.
- Avidov-Ungar, O. and Forkosh-Baruch, A. (2018) 'Professional identity of teacher educators in the digital era in light of demands of pedagogical innovation', *Teaching and Teacher Education*, Vol. 73, pp.183–191, DOI: 10.1016/j.tate.2018.03.017.
- Bak, H.U., Jin, M.H. and McDonald, B.D. (2022) 'Unpacking the transformational leadership-innovative work behavior relationship: the mediating role of psychological capital', *Public Performance and Management Review*, Vol. 45, No. 1, pp.80–105, DOI: 10.1080/15309576.2021.1939737.
- Bardin, L. (2009) *Análise de conteúdo*, 4a, Lisboa: Edições 70.
- Barroso, J. (2018) 'The transversality of regulations in education: a model of analysis for the study of educational policies in Portugal', *Educacao e Sociedade*, Vol. 39, No. 145, pp.1075–1097, DOI: 10.1590/es0101-73302018214219.
- Bartz, A.E. (1999) *Basic Statistical Concepts*, Prentice-Hall, Upper Saddle River, NJ.
- Bellei, C. and Munoz, G. (2021) 'Models of regulation, education policies, and changes in the education system: a long-term analysis of the Chilean case', *Journal of Educational Change*, p.0123456789, DOI: 10.1007/s10833-021-09435-1.

- Bellibaş, M.Ş., Gümtüş, S. and Kılınç, A.Ç. (2020) 'Principals supporting teacher leadership: the effects of learning-centred leadership on teacher leadership practices with the mediating role of teacher agency', *European Journal of Education*, Vol. 55, No. 2, pp.200–216, DOI: 10.1111/ejed.12387.
- Blömeke, S. et al. (2021) 'Supplemental material for school innovativeness is associated with enhanced teacher collaboration, innovative classroom practices, and job satisfaction', *Journal of Educational Psychology*, DOI: 10.1037/edu0000668.supp.
- Brady, A.M. (2019) 'Anxiety of performativity and anxiety of performance: self-evaluation as bad faith', *Oxford Review of Education*, Vol. 45, No. 5, pp.605–618, DOI: 10.1080/03054985.2018.1556626.
- Brown, C., MacGregor, S. and Flood, J. (2020) 'Can models of distributed leadership be used to mobilise networked generated innovation in schools? A case study from England', *Teaching and Teacher Education*, Vol. 94, p.103101, DOI: 10.1016/j.tate.2020.103101.
- Brown, M. et al. (2018) 'Integrated co-professional evaluation? Converging approaches to school evaluation across frontiers', *Australian Journal of Teacher Education*, Vol. 43, No. 12, pp.76–90, DOI: 10.14221/ajte.2018v43n12.6.
- Chen, L. et al. (2016) 'Transformational leadership, social capital, and organisational innovation', *Leadership and Organization Development Journal*, Vol. 37, No. 7, pp.843–859, DOI: 10.1108/LODJ-07-2015-0157.
- Cochran-Smith, M. (2021) 'Rethinking teacher education: the trouble with accountability', *Oxford Review of Education*, Vol. 47, No. 1, pp. 8–24, DOI: 10.1080/03054985.2020.1842181.
- Constantinides, M. (2022) 'High-stakes accountability policies and local adaptation: exploring how school principals respond to multiple policy demands', *School Leadership and Management*, Vol. 42, No. 2, pp.170–187, DOI: 10.1080/13632434.2021.2016687.
- Day, C. (2017) 'Leadership as a way', *Profesorado*, Vol. 21, No. 2, pp.21–26, DOI: 10.1007/978-981-10-3549-4\_7.
- De Matthews, D. (2015) 'Clearing a path for inclusion distributing leadership in a high performing elementary school', *Journal of School Leadership*, November, Vol. 25, pp.1000–1039.
- Devos, G., Tuytens, M. and Hulpia, H. (2014) 'Teachers' organisational commitment: examining the mediating effects of distributed leadership', *American Journal of Education*, Vol. 120, No. 2, pp.205–231, DOI: 10.1086/674370.
- Donaldson, G. (2013) 'Starter paper on inspection and innovation', in *Starter Paper on Inspection and Innovation*, pp.1–8, Bratislava, SICI Workshop [online] <http://www.nmva.smm.lt/wp-content/uploads/2013/06/SICI-Paper-Bratislava-2013-final-version-24-05-Graham-Donaldson.pdf>.
- Edwards, G. (2010) *Mixed-Methods Approaches to Social Network Analysis*, p.15 [online] <http://eprints.ncrm.ac.uk/842/>.
- Espuny, M.T., Cunha, R.S., Cabral, I. and Alves, J.M. (2020) 'Giving voice to problems faced by school leaders in Portugal', *School Leadership & Management*, Vol. 40, No. 4, pp.352–372, DOI: 10.1080/13632434.2020.1719400.
- Fuad, D.R.S.M., Musa, K. and Hashim, Z. (2022) 'Innovation culture in education: a systematic review of the literature', *Management in Education*, Vol. 36, No. 3, pp.135–149, DOI: 10.1177/0892020620959760.
- Fullan, M., Rincón-Gallardo, S. and Hargreaves, A. (2015) 'Professional capital as accountability', *Educational Policy Analysis Archives*, Vol. 23, No. 15, pp.1–18, <http://dx.doi.org/10.14507/epaa.v23.1998>.
- Gil, A.J., Rodrigo-Moya, B. and Morcillo-Bellido, J. (2018) 'The effect of leadership in the development of innovation capacity: a learning organisation perspective', *Leadership and Organization Development Journal*, Vol. 39, No. 6, pp.694–711, DOI: 10.1108/LODJ-12-2017-0399.

- Gkorezis, P. (2016) 'Principal empowering leadership and teacher innovative behavior: a moderated mediation model', *International Journal of Educational Management*, Vol. 30, No. 6, pp.1030–1044, DOI: 10.1108/IJEM-08-2015-0113.
- Hanberger, A. et al. (2016) 'School evaluation in Sweden in a local perspective: a synthesis', *Education Inquiry*, Vol. 7, No. 3, DOI: 10.3402/edui.v7.30115.
- Hargreaves, A. (2007) 'EBSCOhost: sustainable leadership and development in education: creating the future', Vol. 42, No. 2 [online] <http://web.ebscohost.com.ezproxy.apollolibrary.com/ehost/detail?vid=5&hid=123&sid=5ff4bd16-e7cd-4f4f-b069-b5fba0c63d99@sessionmgr110&bdata=JnNpdGU9ZWhtvc3QtbGl2ZQ==#db=a9h&AN=25149963>.
- Hargreaves, A. (2019) 'Teacher collaboration: 30 years of research on its nature, forms, limitations and effects', *Teachers and Teaching: Theory and Practice*, Vol. 25, No. 5, pp.603–621, DOI: 10.1080/13540602.2019.1639499.
- Hargreaves, A. and Ainscow, M. (2015) 'The top and bottom of leadership and change', *Phi Delta Kappan*, Vol. 97, No. 3, pp.42–48, DOI: 10.1177/0031721715614828.
- Hargreaves, A. and Fullan, M. (2012) *Professional Capital: Transforming Teaching in Every School*, Teachers College Press, New York: NY.
- Helgøy, I., Homme, A. and Gewirtz, S. (2007) 'Local autonomy or state control? Exploring the effects of new forms of regulation in education', *European Educational Research Journal*, Vol. 6, No. 3, pp.198–202, DOI: 10.2304/eej.2007.6.3.198.
- Hitt, D.H. and Tucker, P.D. (2016) 'Systematic review of key leader practices found to influence student achievement: a unified framework', *Review of Educational Research*, Vol. 86, No. 2, pp.531–569, DOI: 10.3102/0034654315614911.
- Ho, D. and Lee, M. (2016) 'Capacity building for school development: current problems and future challenges', *School Leadership and Management*, Vol. 36, No. 5, pp.493–507, DOI: 10.1080/13632434.2016.1247040.
- Juwono, I.D. and Harly, T.H. (2017) 'Leadership succession impact on school culture: a case study at a faith based secondary school in Indonesia', *International Journal of Information and Education Technology*, Vol. 7, No. 3, pp.184–189, DOI: 10.18178/ijiet.2017.7.3.863.
- Kaewsang-on, R. et al. (2022) 'A three wave longitudinal study of school innovation climate and entrepreneurship teachers' acceptance to technology: moderating role of knowledge sharing and knowledge hiding', *Frontiers in Psychology*, October, Vol. 13, pp.1–15, DOI: 10.3389/fpsyg.2022.1028219.
- Kardell (2023) 'The necessity of error management culture for employee satisfaction and innovation', *International Journal of Innovation and Learning*, DOI: 10.1504/IJIL.2024.10054216 - In press.
- Keddie, A. (2015) 'School autonomy, accountability and collaboration: a critical review', *Journal of Educational Administration and History*, Vol. 47, No. 1, pp.1–17, DOI: 10.1080/00220620.2015.974146.
- Khalifa, M.A., Gooden, M.A. and Davis, J.E. (2016) 'Culturally responsive school leadership: a synthesis of the literature', *Review of Educational Research*, Vol. 86, No. 4, pp.1272–1311, DOI: 10.3102/0034654316630383.
- Kılıçoğlu, G. and Kılıçoğlu, D.Y. (2021) 'Understanding organisational hypocrisy in schools: the relationships between organisational legitimacy, ethical leadership, organisational hypocrisy and work-related outcomes', *International Journal of Leadership in Education*, Vol. 24, No. 1, pp.24–56, DOI: 10.1080/13603124.2019.1623924.
- Latorre-Coscolluela, C., Sin-Torres, E. and Anzano-Oto, S. (2023) 'Links between innovation and inclusive education: a qualitative analysis of teachers' and leaders' perceptions', *International Journal of Innovation and Learning*, DOI: 10.1504/IJIL.2024.10060368 - In press.
- Leithwood, K. et al. (2004) *How Leadership Influences Student Learning. Review of Research*, The Wallace Foundation, DOI: <https://hdl.handle.net/11299/2035>.
- Lima, L.C. (2021) 'Education management machines: digital domination and augmented bureaucracy', *Educacao e Sociedade*, Vol. 42, pp.1–16, DOI: 10.1590/ES.249276.

- Madeira, J. and Duarte, J. (2018) 'Inspection and innovation: a new relationship with schools?', *Revista Lusofona de Educacao*, Vol. 42, No. 42, pp.45–58, DOI: 10.24140/issn.1645-7250.rle42.03.
- Maroy, C. (2009) 'Convergences and hybridisation of educational policies around 'post-bureaucratic' models of regulation', *Compare*, Vol. 39, No. 1, pp.71–84, DOI: 10.1080/03057920801903472.
- McNamara, G. and O'Hara, J. (2008) 'The importance of the concept of self-evaluation in the changing landscape of education policy', *Studies in Educational Evaluation*, Vol. 34, No. 3, pp.173–179, DOI: 10.1016/j.stueduc.2008.08.001.
- Mincu, M. (2022) 'Why is school leadership key to transforming education? Structural and cultural assumptions for quality education in diverse contexts', *Prospects*, Vol. 52, Nos. 3–4, pp.231–242, DOI: 10.1007/s11125-022-09625-6.
- Morrison, K. (2005) 'Structuration theory, habitus and complexity theory: elective affinities or old wine in new bottles?', *British Journal of Sociology of Education*, Vol. 26, No. 3, pp.311–326, DOI: 10.1080/01425690500128809.
- Mufic, J. (2022) 'Discursive effects of 'quality' talk during a quality audit in Swedish municipal adult education', *Scandinavian Journal of Educational Research*, DOI: 10.1080/00313831.2022.2042844.
- Müller, J.W. (2021) 'Education and inspirational intuition – drivers of innovation', *Heliyon*, Vol. 7, No. 9, p.e07923, DOI: 10.1016/j.heliyon.2021.e07923.
- Nemeržitski, S. et al. (2013) 'Constructing model of teachers innovative behaviour in school environment', *Teachers and Teaching: Theory and Practice*, Vol. 19, No. 4, pp.398–418, DOI: 10.1080/13540602.2013.770230.
- Nóvoa, A. (2019) 'Teachers and their education at a time of school metamorphosis', *Educacao and Realidade*, Vol. 44, No. 3, pp.1–15, DOI: 10.1590/2175-623684910.
- O'Shea, C. (2021) 'Distributed leadership and innovative teaching practices', *International Journal of Educational Research Open*, November, Vol. 2, p.100088, DOI: 10.1016/j.ijedro.2021.100088.
- OECD (2011) 'School autonomy and accountability: are they related to student performance?', *In Focus*, PISA in focus, no. 9, Paris. DOI: [https:// DOI.org/10.1787/5k9h362kcx9w-en](https://doi.org/10.1787/5k9h362kcx9w-en).
- OECD (2015) *The Innovation Imperative Contributing to Productivity, Growth and Well-Being*, Paris, DOI: [https:// DOI.org/10.1787/9789264239814-en](https://doi.org/10.1787/9789264239814-en).
- OECD (2018) *Education at a Glance 2018: OECD Indicators*, DOI: [https:// DOI.org/10.1787/eag-2018-en](https://doi.org/10.1787/eag-2018-en).
- OECD (2020a) *Back to the Future of Education - Four OECD Scenarios for Schooling*, Pmla, OECD Publishing, Paris, DOI: [https:// DOI.org/10.1787/178ef527-en](https://doi.org/10.1787/178ef527-en).
- OECD (2020b) 'Developing a school evaluation framework to drive school improvement', *OECD Education Policy Perspectives*, No. 26.
- Pan, H.L.W. and Chen, W.Y. (2021) 'How principal leadership facilitates teacher learning through teacher leadership: determining the critical path', *Educational Management Administration and Leadership*, Vol. 49, No. 3, pp.454–470, DOI: 10.1177/1741143220913553.
- Park, J.H. and Ham, S.H. (2016) 'Whose perception of principal instructional leadership? Principal-teacher perceptual (dis)agreement and its influence on teacher collaboration', *Asia Pacific Journal of Education*, Vol. 36, No. 3, pp.450–469, DOI: 10.1080/02188791.2014.961895.
- Pina, R., Cabral, I. and Alves, J.M. (2015) 'Principal's leadership on students' outcomes', *Procedia – Social and Behavioral Sciences*, February, Vol. 197, pp.949–954, DOI: 10.1016/j.sbspro.2015.07.279.
- Portz, J. (2021) '“Next-generation” accountability? Evidence from three school districts', *Urban Education*, Vol. 56, No. 8, pp.1297–1327, DOI: 10.1177/0042085917741727.



- Rechsteiner, B. et al. (2022) 'Teachers involved in school improvement: Analysing mediating mechanisms of teachers' boundary-crossing activities between leadership perception and teacher involvement', *Teaching and Teacher Education*, Vol. 116, p.103774, DOI: 10.1016/j.tate.2022.103774.
- Schleicher, A. (2018) 'What makes high-performing school systems different', in *World Class: How to Build a 21st-Century School System*, OECD Publishing, Paris, DOI: <https://doi.org/10.1787/9789264300002-3-en>.
- Serra, L., Alves, J. and Soares, D. (2023) 'The role of external evaluation control mechanisms and the missing loop of innovation', *Journal of Pedagogical Research*, Vol. 7, No. 5, pp.156–182, DOI: 10.33902/JPR.202322764.
- Serra, L., Alves, J. and Soares, D. (2024) 'Mapping innovation in educational contexts: drivers and barriers', *International Journal of Innovation and Learning*, Vol. 35, No. 1, pp.74–98, DOI: 10.1504/IJIL.2024.10054841.
- Shirley, D., Hargreaves, A. and Washington-Wangia, S. (2020) 'The sustainability and unsustainability of teachers' and leaders' well-being', *Teaching and Teacher Education*, Vol. 92, DOI: 10.1016/j.tate.2019.102987.
- Simeonova, R. et al. (2020) 'A continuum of approaches to school inspections: cases from Europe', *Pedagogy*, Vol. 92, No. 4, pp.487–507 [online] <https://www.ceeol.com/search/article-detail?id=857814>.
- Sotiriou, S. et al. (2016) 'Introducing large-scale innovation in schools', *Journal of Science Education and Technology*, Vol. 25, No. 4, pp.541–549, DOI: 10.1007/s10956-016-9611-y.
- Sujudi, N., Komariah, A. and Indonesia, U.P. (2020) 'Leadership characteristics era disruption', *International Conference on Research of Educational Administration and Management (ICREAM), Icream 2019*, Vol. 400, pp.276–279 [online] <https://www.atlantis-press.com/article/125933799.pdf>.
- Tintoré, M. et al. (2022) 'Management model, leadership and autonomy in Portuguese and Spanish public schools: a comparative analysis', *Cogent Education*, Vol. 9, No. 1, DOI: 10.1080/2331186X.2022.2105553.
- Tyunnikov, Y.S. (2017) 'Classification of innovation objectives set for continuing professional teacher development', *European Journal of Contemporary Education*, Vol. 6, No. 1, pp.167–181, DOI: 10.13187/ejced.2017.1.167.
- UNESCO (2017) *Accountability in Education, Meeting Our Commitment*, Global Education Monitoring Report, UNESCO, Paris.
- Verger, A., Fontdevila, C. and Parcerisa, L. (2019) 'Constructing school autonomy with accountability as a global policy model: a focus on OECD's governance mechanisms', *Global Histories of Education*, pp.219–243, DOI: 10.1007/978-3-030-33799-5\_11.
- Vermeulen, M., Kreijns, K. and Evers, A.T. (2020) 'Transformational leadership, leader-member exchange and school learning climate: impact on teachers' innovative behaviour in the Netherlands', *Educational Management Administration and Leadership*, Vol. 48, No. 5, pp.1–20, DOI: 10.1177/1741143220932582.
- Villamor, M.R. et al. (2022) 'A meta-synthesis on school leadership succession: groundwork for effective transition', Vol. 8, No. 5, pp.61–72, DOI: 10.5281/zenodo.6544657.
- Walder, A.M. (2017) 'Pedagogical Innovation in Canadian higher education: professors' perspectives on its effects on teaching and learning', *Studies in Educational Evaluation*, Vol. 54, pp.71–82, DOI: 10.1016/j.stueduc.2016.11.001.
- Walters, S. and Watters, K. (2017) 'Towards a global common good?', *Adult Education Quarterly* [online] <http://www.unesco.org/fileadmin/MULTIMEDIA/FIELD/Cairo/images/RethinkingEducation.pdf>.
- Wang, S. (2019) 'School heads' transformational leadership and students' modernity: the multiple mediating effects of school climates', *Asia Pacific Education Review*, Vol. 20, No. 3, pp.329–341, DOI: 10.1007/s12564-019-09575-3.

- Xiong, W. (2021) 'Identities and education: comparative perspectives in times of crisis', *Educational Review*, DOI: 10.1080/00131911.2021.1957252.
- Yakavets, N., Frost, D. and Khoroshash, A. (2017) 'School leadership and capacity building in Kazakhstan', *International Journal of Leadership in Education*, Vol. 20, No. 3, pp.345–370, DOI: 10.1080/13603124.2015.1066869.
- Yuan, L., Nguyen, T.T.N. and Vu, M.C. (2018) 'Transformational leadership and its impact on performance: The role of psychological capital and collectivism', *ACM International Conference Proceeding Series*, pp.18–27, DOI: 10.1145/3180374.3181325.
- Zamir, S. (2019) 'The polymeric model of school evaluation in the era of accountability', *Quality Assurance in Education*, Vol. 27, No. 4, pp.401–411, DOI: 10.1108/QAE-06-2018-0070.
- Zheng, X., Yin, H. and Liu, Y. (2019) 'The relationship between distributed leadership and teacher efficacy in China: the mediation of satisfaction and trust', *Asia-Pacific Education Researcher*, Vol. 28, No. 6, pp.509–518, DOI: 10.1007/s40299-019-00451-7.
- Zhu, J., Yao, J. and Zhang, L. (2019) 'Linking empowering leadership to innovative behavior in professional learning communities: the role of psychological empowerment and team psychological safety', *Asia Pacific Education Review*, Vol. 20, No. 4, pp.657–671, DOI: 10.1007/s12564-019-09584-2.