

Human Resource Management in Education and Its Role in Enhancing Teacher Professionalism: A Literature Review

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Abstract – *Human Resource Management (HRM) in education plays a pivotal role in enhancing teacher professionalism, particularly in response to increasing demands for educational quality and the ongoing transformation of teaching practices in the digital era. Despite its strategic importance, existing studies indicate that the implementation of educational HRM often encounters challenges, including ineffective leadership, inadequate professional development systems, and suboptimal management of human capital in schools. This study aims to systematically examine the role of educational human resource management in improving teacher professionalism through a comprehensive review of recent scholarly literature. Employing a Systematic Literature Review (SLR) approach, this study analyzes 32 national and international journal articles published between 2020 and 2025. Data were collected through a structured search and selection process based on predefined inclusion criteria and analyzed using thematic analysis. The findings demonstrate that key dimensions of educational HRM—such as recruitment and selection, continuous professional development, performance appraisal, leadership support, and digital competency development—have a significant influence on teachers' professional competence, pedagogical skills, and commitment to continuous improvement. Moreover, the integration of digital-based HRM practices emerges as a crucial factor in strengthening teacher professionalism in contemporary educational settings. The novelty of this study lies in its integrative synthesis of educational human resource management practices and their direct linkage to teacher professionalism. Theoretically, this research enriches the discourse on HRM in education, while practically it provides valuable insights for school leaders and policymakers in designing effective strategies for sustainable teacher professional development.*

Keywords – *Educational Management, School Performance, Educational Leadership, Digital Leadership, Literature Review*

INTRODUCTION

Teacher professionalism is widely recognized as a cornerstone of educational quality and sustainable school improvement. Professional teachers are expected not only to master subject knowledge and pedagogy but also to continuously develop their competencies, adapt to curriculum changes, and respond to rapid technological advancements in education. In this context, Human Resource Management (HRM) in education plays a strategic role

in shaping teachers' professional capacity, motivation, and long-term performance (OECD, 2021).

Educational Human Resource Management refers to a systematic set of practices encompassing workforce planning, recruitment and selection, professional development, performance appraisal, career development, and retention of teachers. Effective HRM practices enable schools to align individual

teacher competencies with institutional goals, thereby fostering continuous professional growth and improving instructional quality (Pauw & Farndale, 2022). Empirical evidence suggests that well-designed HRM systems in education positively influence teachers' job satisfaction, commitment, and professional identity, which are essential dimensions of teacher professionalism (Aguinis et al., 2022).

Despite its importance, the implementation of HRM in educational institutions often faces significant challenges. Studies report persistent issues such as mismatches between teacher qualifications and instructional demands, limited access to continuous professional development, and performance evaluation systems that focus more on administrative compliance than professional growth (Hallinger et al., 2023). These challenges weaken the strategic function of HRM and limit its potential contribution to enhancing teacher professionalism.

The urgency of strengthening educational HRM has increased in the era of digital transformation. Teachers are now required to develop digital competencies, integrate technology into pedagogy, and engage in innovative teaching practices. Consequently, HRM in education must evolve from traditional administrative management toward a strategic and developmental orientation that supports digital skill development, collaborative learning cultures, and lifelong professional learning (Bond et al., 2024). Without such an adaptive HRM approach, efforts to improve teacher professionalism risk becoming fragmented and unsustainable.

Although prior research has extensively examined educational leadership, teacher professional development, and school effectiveness, studies that explicitly synthesize the role of Human Resource Management in education in enhancing teacher professionalism remain limited. Existing literature often addresses HRM components in isolation, rather than integrating recruitment, training, performance

management, and leadership support into a comprehensive analytical framework (Kim & Ployhart, 2023). This indicates a clear research gap that calls for a holistic synthesis of recent empirical findings.

Therefore, this study aims to systematically review and synthesize recent international literature on the role of Human Resource Management in education in enhancing teacher professionalism. By employing a Systematic Literature Review (SLR) of studies published between 2021 and 2026, this research seeks to identify dominant HRM practices, theoretical perspectives, and empirical patterns that explain how HRM contributes to teachers' professional competence, commitment, and continuous development. The findings are expected to contribute theoretically to the advancement of HRM scholarship in educational contexts and practically to inform school leaders and policymakers in designing sustainable HRM strategies that support teacher professionalism.

OBJECTIVES OF THE STUDY

General Objective

This study aims to systematically analyze the role of Human Resource Management (HRM) in education in enhancing teacher professionalism through a comprehensive review of recent scientific literature, with particular attention to how HRM practices contribute to teachers' professional competence, commitment, and continuous professional development.

Specific Objectives

Specifically, this study aims to:

1. Identify dominant Human Resource Management practices in education examined in prior research, including teacher recruitment and selection, professional development, performance appraisal, career development, and retention strategies.
2. Analyze the relationship between educational HRM practices and teacher professionalism, as reflected in indicators such as pedagogical

competence, subject-matter expertise, professional commitment, and lifelong learning orientation.

3. Classify the impact of HRM in education on teacher professionalism across different educational contexts, including primary, secondary, and higher education institutions.
4. Examine emerging trends in educational HRM research, particularly the integration of digital HRM systems, data-driven performance management, and technology-supported professional development for teachers.
5. Identify persistent research gaps in studies on Human Resource Management in education and teacher professionalism, in order to inform future empirical and theoretical research agendas.
6. Formulate theoretical and practical implications for the development of effective, strategic, and sustainable educational HRM policies and practices aimed at strengthening teacher professionalism.

MATERIALS AND METHODS

Research Methodology

This study employs a Systematic Literature Review (SLR) using a qualitative descriptive approach. The purpose of this method is to systematically identify, evaluate, and synthesize existing empirical and theoretical studies that examine the role of Human Resource Management (HRM) in education in enhancing teacher professionalism.

Research Subjects / Objects

The subjects of this research are not individuals but relevant national and international scientific journal articles related to educational HRM and teacher professionalism. A total of 32 peer-reviewed articles published between 2021 and 2026 were selected as units of analysis. These articles represent various educational contexts, including primary, secondary, and higher education institutions.

Research Location

This study is not limited to a specific geographical location, as it is a literature-based investigation. The analyzed studies originate from diverse countries and educational systems, allowing for a global and comparative perspective on Human Resource Management practices in education.

Data Collection Techniques

Data collection was conducted through the following stages:

1. Systematic searching of scientific databases, including reputable international journals and accredited national journals relevant to education and human resource management;
2. Screening and selecting articles based on predefined inclusion and exclusion criteria, such as publication year, relevance to educational HRM, and focus on teacher professionalism;
3. Identifying eligible studies that explicitly discuss HRM practices in education, including recruitment, professional development, performance appraisal, career development, and teacher retention.

Research Instruments

The primary research instrument was a data extraction matrix designed to systematically collect and organize information from each selected article. The extracted data included:

1. Author(s) and year of publication,
2. Type and dimensions of Human Resource Management practices in education,
3. Educational level and institutional context,
4. Research design and methodology,
5. Key findings related to teacher professionalism, such as professional competence, commitment, performance, and continuous professional development.

Data Analysis Techniques

The collected data were analyzed using thematic analysis combined with descriptive-comparative analysis, following these stages:

1. Categorizing articles based on core HRM practices in education,
2. Identifying recurring themes and patterns linking HRM practices to teacher professionalism,
3. Comparing findings across different educational levels and contexts,
4. Synthesizing results to draw comprehensive conclusions aligned with the research objectives and to identify research gaps and future research directions

RESULTS AND DISCUSSION

HRM Practices and Teacher Professionalism

A dominant theme across the reviewed studies is the centrality of core HRM functions, including teacher recruitment and selection, professional development, performance appraisal, supervision, and career development. Studies consistently report that schools implementing structured and needs-based professional development programs experience significant improvements in teachers' pedagogical skills, subject mastery, and professional identity (Aguinis et al., 2022; Paauwe & Farndale, 2022). Performance appraisal systems that emphasize formative feedback rather than administrative compliance are also associated with higher levels of teacher motivation and professionalism (Kim & Ployhart, 2023).

These findings reinforce contemporary HRM theory, which emphasizes the alignment of individual competencies with organizational goals. In educational settings, such alignment enables teachers to continuously refine their instructional practices while responding effectively to curricular and pedagogical demands.

Role of School Leadership in Educational HRM

Another key finding highlights school principal leadership as a critical enabler of effective educational HRM. Empirical studies demonstrate that principals who actively function as human resource leaders—rather than solely administrative managers—positively influence teacher professionalism through supervision,

mentoring, and performance support (Hallinger et al., 2023; Rostini et al., 2022). Principals who promote collaborative cultures and professional learning communities create environments conducive to sustained professional growth.

This evidence supports leadership models that position principals as strategic HR managers, responsible for fostering teacher capacity and ensuring the long-term sustainability of professional standards within schools.

Digital HRM and Teacher Professionalism

Recent literature increasingly emphasizes the role of digital HRM and digital leadership in enhancing teacher professionalism. Studies published after 2021 show that technology-supported HRM practices—such as online professional development, digital performance monitoring, and virtual collaboration platforms—significantly enhance teachers' digital competencies and instructional innovation (Bond et al., 2024; Karakose et al., 2024). Digital leadership facilitates adaptive professional learning environments, enabling teachers to engage in continuous skill development aligned with the demands of digital-era education.

Moreover, emerging research highlights the integration of artificial intelligence (AI) in educational HRM, particularly for personalized professional development and performance analytics, further strengthening teacher professionalism and instructional quality (Zeng et al., 2025).

Contextual Variations and Limitations

Despite the overall positive relationship between HRM and teacher professionalism, the literature reveals contextual variations in outcomes. Several studies report limited impacts of HRM practices in contexts characterized by weak leadership capacity, limited institutional support, or misaligned organizational cultures (Donkoh et al., 2023; Savvidou et al., 2023). These variations suggest that HRM effectiveness depends heavily on contextual readiness, policy coherence, and leadership quality.

Additionally, differences across educational levels—primary, secondary, and higher education—indicate that HRM strategies must be tailored to institutional characteristics and professional expectations unique to each level.

Integrated Perspective on Teacher Professionalism

Overall, the reviewed studies confirm that teacher professionalism is a multidimensional construct shaped by integrated HRM practices, leadership support, and digital innovation. Effective educational HRM not only enhances individual teacher competence but also strengthens professional collaboration, instructional quality, and institutional capacity for continuous improvement. These findings underscore the necessity of adopting holistic and adaptive HRM frameworks to address the evolving challenges of 21st-century education.

Analysis of the literature reveals a strong and consistent relationship between Human Resource Management (HRM) in education and teacher professionalism. The reviewed studies demonstrate that effective educational HRM practices—such as planning, organizing, actuating, and controlling human resources—serve as fundamental mechanisms for developing teachers' professional competence, instructional effectiveness, and commitment to continuous improvement. These findings align with classical management theories that position HRM functions as key drivers of organizational effectiveness in educational settings. Thus, this study confirms the theoretical assumption that effective educational HRM directly contributes to the enhancement of teacher professionalism.

More specifically, the reviewed literature identifies school principal leadership in managing human resources as a primary determinant of successful teacher professionalism. Empirical evidence from Rostini et al. (2022), Siregar (2024), and Michael and Mhando (2024) indicates that principals who effectively implement HRM practices—through

supervision, performance evaluation, motivation, and professional support—significantly improve teachers' professional performance and instructional quality. These results reinforce educational leadership theory, positioning school principals not only as instructional leaders but also as strategic human resource managers who align teacher capabilities with institutional goals.

Beyond conventional leadership approaches, the findings highlight the growing importance of technology-based HRM and digital leadership in strengthening teacher professionalism. Systematic studies by Obied (2025), Zhu et al. (2025), and Zeng et al. (2025) reveal that the integration of digital leadership and technology-enabled HRM practices enhances teachers' digital competencies, pedagogical innovation, and readiness for professional adaptation in digitally transformed learning environments. These insights are consistent with contemporary HRM frameworks that emphasize adaptability, innovation, and continuous professional learning as prerequisites for sustainable teacher professionalism.

However, the analysis also uncovers contextual variations in the effectiveness of educational HRM practices. Several studies report suboptimal impacts on teacher professionalism in contexts where managerial competencies are limited or organizational cultures do not adequately support professional development (Donkoh et al., 2023; Savvidou et al., 2023). These variations reflect differences in geographical settings, educational levels, institutional readiness, and research methodologies, underscoring that the influence of HRM in education is context-dependent rather than universal.

Additionally, studies focusing on student affairs and classroom management indicate that effective learner management indirectly supports teacher professionalism by fostering disciplined, supportive, and well-structured learning environments (Takengon & Tengah, 2025; Rawis et al., 2024). These findings extend the understanding that teacher professionalism is shaped not only by direct HRM

interventions, such as training and appraisal, but also by integrated management of students, curriculum, and learning processes.

Overall, the discussion demonstrates strong alignment between the reviewed findings and core principles of Human Resource Management in education. Despite contextual differences in implementation, the literature consistently affirms that educational HRM plays a multidimensional, dynamic, and central role in enhancing teacher professionalism.

The Role of Professional Development and Performance Management in Enhancing Teacher Professionalism

Professional development emerges as one of the most influential dimensions of Human Resource Management (HRM) in education for strengthening teacher professionalism. The reviewed literature consistently emphasizes that continuous, structured, and needs-based professional development programs significantly enhance teachers' pedagogical competence, subject-matter mastery, and reflective teaching practices (Darling-Hammond et al., 2021; OECD, 2023). Teachers who participate in sustained professional learning opportunities demonstrate higher levels of instructional effectiveness and professional confidence.

Beyond training activities, performance management systems play a crucial role in shaping teacher professionalism. Studies highlight that performance appraisal mechanisms oriented toward formative feedback, coaching, and professional growth—rather than punitive evaluation—positively influence teacher motivation and professional commitment (Aguinis et al., 2022; Kim & Ployhart, 2023). When appraisal systems are aligned with professional development goals, teachers perceive evaluation processes as supportive rather than administrative burdens.

Several studies further reveal that professional development is most effective when embedded within

collaborative learning cultures, such as professional learning communities (PLCs) and mentoring systems. Such HRM approaches encourage peer learning, knowledge sharing, and collective responsibility for instructional quality, thereby strengthening teachers' professional identity and collegiality (Hallinger et al., 2023). This indicates that professionalism develops not only through individual training but also through social and organizational learning processes.

However, the literature also reports challenges in implementing effective professional development and performance management. In some educational contexts, professional development programs remain fragmented, short-term, or misaligned with teachers' actual instructional needs, resulting in limited professional impact (Donkoh et al., 2023). Similarly, appraisal systems that prioritize compliance over development tend to weaken teacher engagement and trust in management.

Overall, the findings confirm that professional development and performance management are core HRM mechanisms for enhancing teacher professionalism. Their effectiveness depends on strategic alignment, leadership support, and a developmental orientation that views teachers as long-term professional assets rather than merely operational resources.

Digital Human Resource Management and the Future of Teacher Professionalism

The literature increasingly highlights Digital Human Resource Management (Digital HRM) as a transformative force in enhancing teacher professionalism. Digital HRM refers to the integration of digital technologies into HRM functions, including recruitment, training, performance evaluation, and professional collaboration. Recent studies indicate that digital HRM systems improve access to professional learning, streamline performance monitoring, and support data-informed decision-making in education (Bond et al., 2024; Zhang & Ng, 2024).

One major advantage of digital HRM lies in its capacity to support personalized and flexible professional development. Online training platforms, learning management systems, and virtual communities enable teachers to engage in continuous learning tailored to their professional needs and schedules. Empirical evidence suggests that such flexibility enhances teachers' autonomy and self-directed professional growth, key dimensions of professionalism (Antonopoulou et al., 2025).

In addition, digital leadership plays a mediating role in the successful implementation of digital HRM. Studies show that principals who demonstrate strong digital leadership competencies are more effective in fostering teachers' digital skills, instructional innovation, and openness to change (Karakose et al., 2024; Obied, 2025). Digital leadership thus acts as an enabler that connects technological infrastructure with human resource development objectives.

Emerging research also points to the growing role of artificial intelligence (AI) in educational HRM, particularly in teacher performance analytics, competency mapping, and targeted professional development recommendations (Zeng et al., 2025). While still at an early stage, AI-supported HRM systems show potential to enhance teacher professionalism by providing more accurate, timely, and individualized feedback.

Nevertheless, the literature cautions that digital HRM implementation must consider issues of digital readiness, equity, and ethical governance. Inadequate infrastructure, limited digital literacy, and resistance to technological change can hinder the effectiveness of digital HRM initiatives (Savvidou et al., 2023). Therefore, digital HRM should be implemented as part of a broader strategic and human-centered HRM framework.

Collectively, these findings indicate that digital HRM represents a critical future direction for enhancing teacher professionalism, provided it is

supported by strong leadership, inclusive policies, and continuous capacity building.

Research Implications

Theoretical Implications

Theoretically, this study strengthens Human Resource Management (HRM) in education scholarship by positioning teacher professionalism as a key outcome of interacting HRM approaches, including strategic leadership, instructional supervision, performance management, professional development, and digital HRM. The findings support the view that teacher professionalism is not shaped by isolated management practices but emerges from integrated and adaptive HRM systems. This study therefore provides a conceptual foundation for developing holistic and responsive educational HRM models capable of addressing the complex challenges of 21st-century education

Practical Implications

Practically, the findings offer important guidance for school principals, educational administrators, and institutional leaders. Schools should strengthen HRM capacities by improving teacher recruitment, continuous professional development, performance appraisal, and supervisory practices. Particular emphasis should be placed on leveraging digital technologies and digital HRM systems to support instructional improvement, professional learning, and administrative efficiency. Systematic and sustainable HRM implementation is essential for fostering long-term teacher professionalism.

Policy Implications

The findings inform educational policies prioritizing school management and leadership strengthening as core quality enhancement strategies. Professional development policies for principals and teachers focusing on digital leadership and quality-based management are highly relevant for implementation.

Social Implications

Socially, strengthening teacher professionalism through effective educational HRM can improve instructional quality, educational equity, and public trust in educational institutions. In the long term, professionally managed human resources in education contribute to higher-quality human capital development and positive societal transformation..

Implications for Future Research

Future research should extend this literature review by conducting quantitative and mixed-methods empirical studies to test causal relationships between HRM practices and teacher professionalism. Further exploration of digital HRM, digital leadership, and artificial intelligence applications in educational human resource management represents a promising direction for advancing both theory and practice.

CONCLUSION AND RECOMMENDATION

Based on the literature analysis conducted, Human Resource Management (HRM) in education exerts a significant and positive influence on teacher professionalism. Effective educational HRM—implemented through school principal leadership, teacher management, curriculum support, student affairs management, and quality- and technology-based approaches—consistently contributes to enhanced teacher competence, instructional effectiveness, and professional commitment. These findings affirm that teacher professionalism is a central outcome of well-structured and strategically implemented HRM practices in educational institutions.

The review highlights school principal leadership as a critical factor in successful educational HRM. Principals who effectively perform managerial and leadership functions create supportive professional environments, foster continuous teacher development, and enhance the overall quality of teaching and learning processes. Furthermore, digital leadership and technology-enabled HRM emerge as increasingly relevant approaches in strengthening teacher

professionalism amid ongoing digital transformation, particularly by supporting instructional innovation, professional learning, and educational technology integration.

Although most studies demonstrate a positive relationship between educational HRM and teacher professionalism, variations in findings reflect differences in educational contexts, managerial competencies, organizational culture, and institutional readiness. This indicates that the impact of HRM on teacher professionalism is multidimensional and context-dependent, requiring adaptive, strategic, and sustainable management approaches.

Recommendations

Practical Recommendations

1. School principals should strengthen strategic HRM and leadership competencies, including teacher planning, supervision, performance appraisal, and professional development.
2. Educational institutions should implement quality-oriented and technology-based HRM practices, integrating digital leadership into both instructional and administrative processes.
3. Continuous teacher professional development should be promoted through training, academic supervision, coaching, and needs-based mentoring aligned with institutional contexts.

Policy Recommendations

1. Governments and educational policymakers should prioritize human resource management and leadership development as key strategies for enhancing teacher professionalism.
2. Principal preparation and development programs should emphasize innovative and digital HRM competencies to enable schools to respond effectively to technological and pedagogical changes.
3. Teacher evaluation policies should extend beyond outcome-based measures to include professional growth, instructional quality, and developmental feedback.
4. Recommendations for Future Research

5. Future studies should employ quantitative or mixed-methods designs to examine causal relationships between HRM practices and teacher professionalism.
6. Further investigation into the roles of digital leadership, digital HRM, and artificial intelligence in educational human resource management is strongly recommended.
7. Comparative research across educational levels and national contexts is needed to deepen understanding of HRM effectiveness in enhancing teacher professionalism.

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