



ISSN 2809-8501 (Online)

UTSAHA: Journal of Entrepreneurship

<https://journal.jfpublisher.com/index.php/joe>

Vol. 5, Issue 3, July 2026

doi.org/10.56943/joe.v5i3.1021

Strategic Human Resource Management Responses to Teacher Shortage in Indonesian Rural Vocational Schools

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ABSTRACT

The shortage of qualified teachers in private vocational schools located in rural and remote regions of Indonesia represents a persistent structural challenge that directly undermines educational continuity and institutional sustainability. This study investigates the factors contributing to educator shortages at SMKS Al Fajar Parenggean, East Kotawaringin Regency, Central Kalimantan, and analyses the strategic human resource management responses adopted by the school in addressing these conditions. A qualitative descriptive approach with a case study design was employed, with data collected through in-depth interviews with the school principal, productive teachers, and Dapodik operators, complemented by participatory observation and documentation review. Data were analysed using the Miles, Huberman, and Saldaña interactive model, with validity established through source and theoretical triangulation. Three principal causal factors were identified: teacher migration to government institutions through ASN/PPPK recruitment, the exclusionary provisions of the Dapodik registration system, and the absence of certified Dayak language instructors following mandatory regional language policy enforcement. The school responded by implementing five integrated SHRM elements, namely adaptive leadership, community-based alumni recruitment, cross-disciplinary staffing collaboration, strategic workforce planning, and performance review, supported by social media-based digital literacy development. The findings demonstrate that locally grounded SHRM, anchored in community networks and indigenous cultural competencies, constitutes a viable and replicable adaptive governance framework for rural vocational schools confronting structural human resource constraints.

Keywords: *Agricultural Vocational School, ASN/PPPK Policy, Central Kalimantan, Rural Education, Strategic Human Resource Management, Teacher Shortage*

INTRODUCTION

The shortage of educators in private schools constitutes a structural challenge that extends beyond the question of institutional financial capacity (Scott & Guan, 2023). Sebtianingsih et al. (2024) believed that this phenomenon is closely linked to the national policy on the State Civil Apparatus (*Aparatur Sipil Negara/ASN*) and Government Employees with Employment Agreements (*Pegawai Pemerintah dengan Perjanjian Kerja/PPPK*), which has systematically incentivised the transfer of qualified teachers from private to public schools. As teachers seek career stability and more competitive remuneration under government employment schemes, private schools, particularly those located in rural and remote regions, are left with progressively diminishing human resource capacity. This dynamic illustrates not merely a supply-and-demand imbalance, but rather a deeper governance gap in the national management of educational human resources.

In the context of rural education in Indonesia, the challenge of teacher shortages is compounded by geographical isolation, inadequate infrastructure, and the relatively low welfare provisions afforded to educators in non-government schools (Rivera et al., 2025). International research corroborates this reality; Medlin et al. (2024) demonstrated through a scoping review that the limited availability of adequate housing facilities and elevated living costs in remote areas constitute primary structural barriers to the equitable distribution and long-term retention of the teaching workforce. These findings are consistent with broader evidence indicating that geographic and socioeconomic disadvantage significantly reduces both the attractiveness and the sustainability of teaching careers in peripheral regions (Lindqvist & Gidlund, 2025; Thompson-Lee et al., 2025).

Such conditions are prominently manifested in Central Kalimantan, where educators employed by private schools confront systemic obstacles including insufficient educational infrastructure and limited professional support facilities. These constraints are particularly acute at SMKS Al Fajar Parenggean, a private agricultural vocational school (*Sekolah Menengah Kejuruan Swasta*) located in East Kotawaringin Regency. The school faces a dual institutional challenge: a critically low number of qualified productive teachers in the agricultural field, combined with a declining interest among the younger generation in pursuing careers within the agribusiness sector. This disengagement from agriculture as a vocational pathway is not isolated to this institution; prior research indicates that the majority of students in agricultural programs hold a limited understanding of agribusiness concepts and their relationship to food security and sustainable development (Dewantoro & Maria, 2022).

By the beginning of 2025, SMKS Al Fajar Parenggean had experienced a significant reduction in its productive teaching staff. Two agriculture educators had departed to pursue positions within government agencies following successful participation in the ASN/PPPK recruitment programs, leaving only one active

teacher to assume responsibility for all productive learning activities. This situation reflects a broader, systemic pattern of low teacher retention in private vocational schools, a phenomenon that has been identified in the literature as a global concern with particular severity in the vocational education sector (Lindqvist & Gidlund, 2025). The consequences of such shortages extend beyond instructional continuity; they erode institutional innovation capacity and compromise the long-term viability of vocationally oriented programs rooted in local agribusiness.

A concurrent policy challenge has further compounded the human resource situation at the school. The Central Kalimantan Education Office (2024) established a mandatory policy requiring the teaching of the Dayak language as a local content subject in all educational units, as formalised through the Decree of the Head of the Education Office Number 421/3565/Disdik/IX/2024. The objective of this policy is to institutionalise the preservation of regional cultural values and indigenous languages within the formal education system. However, its implementation has been impeded by a critical shortage of teachers who hold the requisite Dayak language certification. This gap between cultural preservation policy and the availability of competent human resources to execute it reflects a broader tension between educational reform ambitions and on-the-ground institutional readiness.

In response to these compounding challenges, Strategic Human Resource Management (SHRM) has emerged as a theoretically grounded and practically relevant framework for strengthening the management of educational human resources. SHRM integrates organisational strategy with adaptive, long-term oriented human resource policies, placing emphasis on visionary leadership, cross-stakeholder collaboration, and the continuous development of educator competencies (Setiawati et al., 2024; Thompson-Lee et al., 2025). Unlike conventional human resource approaches that operate reactively, SHRM enables institutions to anticipate workforce disruptions and develop contextually responsive strategies that align human capital development with broader organisational goals (Astutiningsih et al., 2024).

This study aims to examine the factors contributing to educator shortages at SMKS Al Fajar Parenggean and to analyse the recruitment and retention strategies developed by the school in addressing these conditions through a local-potential-based approach. The novelty of this research lies in its integration of SHRM principles with locally embedded recruitment strategies, positioning local wisdom and community-based talent development as central rather than supplementary elements of educational human resource management. The findings are expected to contribute both conceptually, to the advancement of human resource management models in vocational schools, and practically, to the formulation of context-sensitive solutions for regions facing similar challenges.

LITERATURE REVIEW

Teacher Shortage in Vocational Education: Structural Causes and Retention Challenges

Teacher shortage in vocational schools is a structural and multi-dimensional problem that cannot be reduced to budgetary constraints alone. Lindqvist and Gidlund (2025) identified through a systematic literature review that the primary drivers of teacher attrition include inequitable employment status, insufficient career security, and limited access to professional development opportunities. These factors are compounded in rural settings where geographic isolation and inadequate living conditions further diminish the attractiveness of teaching as a long-term vocation (Medlin et al., 2024). In the Indonesian context, the implementation of the ASN/PPPK recruitment program has accelerated the departure of competent teachers from private institutions toward government schools, creating a structural asymmetry in the distribution of qualified educators between the two sectors (Victorynie et al., 2024). This condition is further exacerbated by the limitations of the Basic Education Data system (*Dapodik*), which excludes unregistered honorary teachers from formal recognition and benefits, thereby weakening their occupational security and increasing the likelihood of attrition. These compounding pressures underscore the urgent need for institutional-level strategies capable of sustaining educator continuity independent of national policy fluctuations.

Strategic Human Resource Management in Educational Institutions

Strategic Human Resource Management (SHRM) refers to the deliberate alignment of human resource practices with the broader strategic objectives of an organisation. In educational institutions, SHRM functions as an integrative system that links teacher recruitment, retention, competency development, and performance management to long-term institutional goals (Astutiningsih et al., 2024). Anvari et al. (2023) demonstrated that SHRM practitioners in higher education who exhibit high emotional intelligence are more effective in sustaining employee commitment during periods of organisational disruption, an insight that is directly transferable to vocational school management facing workforce instability. At the institutional level, Firmansyah et al. (2022) established that transformational leadership, when combined with structured knowledge management practices, significantly enhances vocational school performance by fostering adaptive organisational cultures. Setiawati et al. (2024) further reinforced the relevance of SHRM in the Indonesian context, demonstrating that inclusive talent development practices embedded within HR strategies produce measurable gains in both educator engagement and institutional sustainability. Collectively, these findings position SHRM not as a corporate management tool but as an

essential governance framework for educational institutions navigating resource constraints and policy-driven workforce disruptions.

Local Wisdom as a Foundation for Community-Based Talent Development

The integration of local wisdom into educational human resource strategies represents an underexplored but theoretically significant dimension of vocational school management (Rasidi & Istiningsih, 2025). Local wisdom, defined here as the contextual knowledge, values, and practices embedded within a specific community, provides a culturally appropriate foundation for talent identification, recruitment, and development in regions where conventional HR pipelines are limited (Anderson, 2024; Zhang et al., 2022). In the context of agricultural vocational education, local wisdom encompasses familiarity with indigenous farming practices, regional ecological knowledge, and language competencies such as the Dayak language. These attributes constitute forms of tacit human capital that formal credential systems may fail to capture or incentivise. Thompson-Lee et al. (2025) noted that interventions integrating contextual and community-based elements are among the most promising strategies for addressing teacher recruitment challenges in specialised subject areas, a finding that supports the rationale for locally rooted SHRM approaches. The alignment of institutional HR strategy with community-based talent pipelines thus represents both a practical necessity and a conceptual contribution to the broader discourse on sustainable educational human resource management in rural Indonesia.

RESEARCH METHODOLOGY

This study was conducted at SMKS Al Fajar Parenggean, East Kotawaringin Regency, Central Kalimantan Province, with a focus on human resource management strategies employed in response to the shortage of productive teachers in the agricultural field and the absence of certified Dayak language instructors. A qualitative descriptive approach with a case study design was adopted, as this method is most appropriate for obtaining a deep, contextualised understanding of human resource management dynamics within a specific institutional setting (Ariyani et al., 2021). The case study design is particularly suited to examining contemporary phenomena in their real-life context, especially where the boundaries between the phenomenon and its environment are not clearly defined (Creswell & Creswell, 2023).

Research participants were selected through purposive sampling and comprised individuals with direct involvement in the school's human resource management system, namely the school principal, productive teachers in the agricultural field, Dapodik operators, and alumni who serve a dual role as prospective productive teachers and Dayak language instructors. This selection was intended to ensure the representativeness of perspectives across the primary

stakeholders involved in planning, recruitment, and educational human resource development.

Data were collected through three complementary techniques: in-depth interviews, participatory observation, and documentation studies. The combination of these methods was employed to produce a comprehensive empirical picture of the school's human resource conditions and management responses. Data analysis followed the interactive model developed by Miles et al. (2020), which comprises three iterative stages: data reduction, data presentation, and conclusion drawing and verification. This process was conducted in a cyclical manner to maintain consistency and interpretive depth across all stages of analysis.

The validity and credibility of the research findings were strengthened through the application of source triangulation and theoretical triangulation, as recommended by Sugiyono (2022). Source triangulation involved cross-checking information obtained from different informants, while theoretical triangulation facilitated the verification of findings against established theoretical frameworks in SHRM and educational human resource management.

RESULT AND DISCUSSION

Factors Contributing to Teacher Shortage at SMKS Al Fajar Parenggean

The findings drawn from interviews with the school principal and productive teachers reveal that the shortage of educators at SMKS Al Fajar Parenggean is not the product of a single cause but the convergence of three interrelated structural factors. These are summarised in Table 1.

Table 1 Factors Causing the Teacher Shortage at SMKS Al Fajar Parenggean

Key Factors	Description	Impact on Schools
Migration of teachers to government agencies	Two productive teachers transferred following successful participation in the ASN/PPPK selection program	Critical shortage of teaching staff in the agricultural productive field
Limitations of the Dapodik system	Honorary teachers who have not been registered in the system for a minimum of two years are ineligible for formal recognition	Exclusion from employment benefits and sustained occupational instability
Absence of certified Dayak language teachers	Implementation of a new mandatory local content policy on Dayak language in Central Kalimantan	Dayak language instruction has not been optimally delivered; no certified teachers are currently available

Source: Interview Data Processed by Researchers (2025)

The first factor, the migration of productive teachers to government agencies through the ASN/PPPK route, reflects a structural asymmetry between the public and private education sectors in Indonesia. The welfare gap between government-employed and privately employed teachers constitutes the primary driver of this migration, as public employment offers greater career stability, formal remuneration structures, and social security benefits that private schools are unable to match. This finding is consistent with the view of Lindqvist and Gidlund (2025), who confirmed that inequitable employment conditions and limited career security are among the most persistent determinants of teacher attrition globally. The departure of two productive agricultural teachers from this single institution reduced the active teaching corps to one educator, a condition that carries direct implications for instructional continuity, workload distribution, and student learning outcomes.

The second factor concerns the structural limitations embedded within the Basic Education Data system (Dapodik). Honorary teachers who have not been registered in the system for a minimum of two years are excluded from formal recognition, rendering them ineligible for welfare benefits and professional status. This creates a cycle of occupational precariousness that weakens teacher motivation and elevates turnover rates. Putra et al. (2025) confirmed in their study of public sector institutions in Indonesia that work environment conditions and motivational factors are strongly interconnected, and that the absence of institutional support mechanisms directly undermines employee performance stability — findings that are equally applicable to the school-level context examined in this study. The inability of the Dapodik system to accommodate the employment realities of non-ASN teachers in private schools thus represents a governance gap with tangible consequences at the institutional level.

The third factor pertains to the absence of teachers holding certification in the Dayak language, a condition rendered more acute by the Central Kalimantan Education Office's mandatory policy requiring the teaching of regional languages as a local content subject. The gap between this policy aspiration and the available supply of qualified educators illustrates a broader tension between regulatory ambition and institutional readiness, a challenge that extends across culturally diverse regions in Indonesia where indigenous language preservation intersects with formal education governance.

Implementation of SHRM in the Management of Productive Teachers and Local Content

In addressing the complexity of these compounding challenges, the implementation of Strategic Human Resource Management (SHRM) provides a structured and adaptive framework through which SMKS Al Fajar Parenggean has sought to sustain its educational functions. The five SHRM elements operationalised by the school are presented in Table 2.

Table 2 Implementation of SHRM Dimensions in Teacher Management at SMKS Al Fajar Parenggean

SHRM Elements	Context of Implementation in Schools
Strategic Planning	The school developed adaptive measures to address teacher shortages resulting from ASN/PPPK migration and Dapodik limitations, including forward-looking workforce mapping and contingency staffing arrangements
Talent Management	Alumni of the Agricultural Food Crops and Horticulture Agribusiness (ATPH) program with agricultural competencies and Dayak language proficiency were recruited to fill vacancies in both productive teaching and local content instruction
Leadership Development	The Deputy Principal for Curriculum concurrently assumed the role of Programme Head, maintaining instructional coordination and continuity across academic units during the period of staffing deficiency
Organizational Design	Cross-disciplinary collaboration was institutionalised, with Biology teachers incorporated into agricultural practical sessions to compensate for the reduced productive teaching staff
Performance Management	End-of-semester evaluations were conducted to assess the effectiveness of newly recruited teachers and the efficiency of cross-disciplinary collaboration arrangements

Source: Interview Data Processed by Researchers (2025)

The integration of these five SHRM elements demonstrates the school's capacity to translate institutional strategy into adaptive human resource practices. This alignment is consistent with the framework articulated by Astutiningsih et al. (2024), who established that SHRM functions most effectively when HR practices are deliberately calibrated to organisational strategy rather than implemented reactively. The talent management dimension, in particular, reflects a community-based recruitment approach wherein alumni of the school's own agricultural program were identified and mobilised as prospective educators. This strategy not only addresses the immediate vacancy but simultaneously reinforces the preservation of local cultural competencies, including Dayak language proficiency, within the formal educational setting (Zhang et al., 2022).

The leadership development element, manifested through the dual role assumed by the Deputy Principal for Curriculum, exemplifies the adaptive leadership capacity described by Siliņa-Jasjukeviča et al. (2025), who found that effective VET teacher development is closely associated with transformative leadership practices that foster collective responsibility and sustain institutional performance under conditions of resource constraint. Firmansyah et al. (2022) similarly demonstrated that the interplay between transformational leadership and

knowledge management significantly improves the operational performance of vocational schools, particularly in contexts characterised by rapid environmental change and limited human resource availability.

The cross-disciplinary organisational design, wherein Biology teachers contribute to agricultural practical instruction, reflects a flexible collaborative arrangement appropriate to the school's resource context. This arrangement is grounded in the recognition that biology in agricultural vocational schools shares substantial conceptual and practical overlap with productive agricultural learning, thereby enabling cross-disciplinary instruction without fundamentally compromising curriculum integrity. The application of continuous performance review at semester intervals, as recommended by Thompson-Lee et al. (2025), further ensures that this adaptive arrangement remains subject to ongoing quality assessment and refinement.

Strengthening Digitalisation and Adaptive Leadership

Beyond internal HR strategies, SMKS Al Fajar Parenggean has extended its institutional adaptation to encompass digital communication and branding. The school established a dedicated Instagram account for the ATPH Agribusiness Expertise Program as a platform for documenting and publishing student agricultural practice activities. This initiative serves a dual function: as a mechanism for public communication and school promotion, and as a space for students to present their work and innovations to a broader audience (Lee, 2024). Figure 1 illustrates how this account has been utilised to document practical agricultural activities.



Figure 1 Instagram Account of the ATPH Agribusiness Expertise Program, SMKS Al Fajar Parenggean

Source: Primary Documentation (2025)

The use of social media as an institutional communication tool reflects what Setiawati et al. (2024) describe as sustainable HR practices rooted in digital innovation, wherein technology-enabled communication strengthens both institutional branding and the professional identity of educators. By involving teachers directly in the planning, production, and evaluation of digital content, the school simultaneously develops educator digital literacy as an organic component of daily professional practice, a distinction that research identifies as central to the sustainability of digital competence development (Fernández-Otoya et al., 2024).

The school's leadership practice further supports this adaptive institutional culture. Anvari et al. (2023) found that emotional intelligence among SHRM practitioners positively affects organisational commitment, particularly during periods of institutional disruption; a finding that resonates with the leadership behaviour observed at SMKS Al Fajar Parenggean, where the principal's consistent engagement with staff welfare and motivational support contributed to sustained educator performance. Silina-Jasjukeviča et al. (2025) corroborate this, establishing that adaptive leadership combined with targeted professional development constitutes one of the most reliable determinants of institutional resilience in vocational education contexts.

CONCLUSION

The findings of this study establish that the shortage of educators at SMKS Al Fajar Parenggean is a structural and systemic problem rooted in the convergence of three principal factors: the migration of qualified teachers to government institutions through the ASN/PPPK recruitment programs, the exclusionary limitations of the Dapodik system with respect to unregistered honorary teachers, and the critical absence of certified Dayak language instructors in the context of a newly mandated regional language policy. These factors do not operate in isolation but interact in ways that collectively undermine the school's capacity to sustain a qualified and stable teaching workforce. The evidence presented in this study confirms that the challenge of educator shortage in rural private vocational schools cannot be adequately addressed through policy interventions at the national level alone, as the structural causes are deeply embedded in the interplay between governance, welfare, and local institutional conditions.

The implementation of Strategic Human Resource Management at SMKS Al Fajar Parenggean has demonstrated that adaptive, locally grounded HR strategies are capable of sustaining educational continuity in the face of severe resource constraints. The five SHRM elements applied by the school, namely strategic planning, talent management through local alumni recruitment, adaptive leadership development, cross-disciplinary organisational design, and continuous performance review, collectively produced a flexible and participatory institutional response. The integration of digital literacy practices through social media management further strengthened the school's institutional resilience and educator professional development. These outcomes affirm the relevance of SHRM not merely as a corporate management framework but as an adaptive governance instrument applicable to educational institutions operating in geographically and socioeconomically marginalised contexts.

This study contributes both conceptually and practically to the discourse on educational human resource management in rural Indonesia. Conceptually, it advances a local wisdom-centred model of SHRM that repositions community-based talent development as a primary rather than supplementary HR strategy. Practically, the findings carry direct policy implications for regional governments, particularly regarding the need to expand Dayak language teacher certification programs, revise Dapodik eligibility criteria to be more inclusive of non-ASN educators in private schools, and establish formal partnerships between private vocational schools and local alumni networks. Future research is encouraged to undertake comparative studies across vocational schools in other rural regions of Indonesia, in order to develop a more comprehensive and contextually grounded model of educational human resource management responsive to the diverse conditions of the country's peripheral education landscape.

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