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Modelling Inclusive Knowledge Systems and Leadership Effects on Teacher Outcomes in Bogor's Inclusive Primary Schools: A SEM-PLS and IPMA Study

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ABSTRACT. This study investigates the moderating roles of both managerial and community-based inclusive leadership in how an inclusive knowledge system—covering acquisition, dissemination, and utilisation—influences teacher satisfaction and motivation in inclusive primary schools. Conducted in Bogor City, one of West Java's cities with the highest number of students with special needs, the research was carried out from August 2024 to July 2025. Data were collected through a validated questionnaire from participants selected via purposive sampling, including 100 inclusive educators, 10 inclusive school principals, and an expert from the Education Office of Bogor City, to develop strategic recommendations. Quantitative data were analysed using SEM-PLS and IPMA (with SmartPLS 4 Software). Findings reveal that Teacher Satisfaction was significantly affected by all knowledge systems and managerial inclusive leadership, while Teaching Motivation was influenced only by Knowledge Acquisition and managerial inclusive leadership ($p<0.05$). Managerial Inclusive Leadership significantly moderated Knowledge Dissemination but did not moderate Knowledge Acquisition and Utilisation at all. Community Inclusive Leadership significantly moderated the effects of Knowledge Dissemination on Teaching Motivation and of Knowledge Acquisition on Teacher Satisfaction. Another important finding is that Teacher Satisfaction does not have a significant effect on Teaching Motivation (p-value = 0.228 > 0.05). IPMA results emphasise that Knowledge Dissemination, Acquisition, and Managerial Inclusive Leadership are essential but require support due to their weak performance. The study recommends practical steps for the education office and inclusive schools to implement policies and provide facilities that promote knowledge sharing and improve the competence of inclusive educators.

Keywords: *Inclusive leadership, Inclusive primary schools, Knowledge systems, Quality education, Teacher satisfaction and motivation*

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INTRODUCTION

Inclusive education has become one of the Sustainable Development Goals (SDGs) 'strategic goals to ensure inclusive and equitable quality education and support lifelong learning opportunities for all by 2030. Inclusive education is a process that necessitates profound cultural transformation to create an education system that supports all learners, including those from marginalised and vulnerable groups (The World Bank, 2022). Inclusive education aims to provide equal opportunities for all students to enjoy high-quality education and develop all-around capabilities without exclusion or discrimination (Zhu & Wang, 2010). Thus, by considering all aspects of children's development,

inclusive education is the most effective approach to enable them to lead whole and independent lives (Kamble & Gaikwad, 2021).

The government of the Republic of Indonesia is greatly concerned about inclusive education. Data show that there are 50,999 students with special needs in Indonesia, of which 11% are in West Java, including Bogor City, which has one of the highest proportions of students with special needs. Undang-Undang No. 8/2016 concerning Penyandang Disabilitas states that the right to education for Persons with Disabilities includes receiving quality education in all types of educational units, pathways, and levels, both inclusively and specifically, and receiving appropriate accommodations as students. Policy implementation still faces many obstacles, including limited teacher competency, limited facilities and infrastructure, insufficient training for teaching staff, and policies that are not yet optimal (Sitanggang et al., 2025).

Ministry of Primary and Secondary Education of the Republic of Indonesia, organising a Teacher Professional Education transformation program to produce teachers who are not only academically superior, but also have teaching competencies that can embrace the diversity of students (Kemendikdasmen, 2025). These policies and programs encourage alignment between improving educators' quality and the overall quality of inclusive education delivery, including facilities and infrastructure, as well as support for inclusive knowledge systems. The development of inclusive education in Indonesia faces many challenges and barriers. The challenges and obstacles faced by several countries in implementing inclusive education include a lack of teacher training and mistakes in institutional policy-making (Sari & Hendriani, 2021). Undocumented components in the implementation of school education relate to the learning process, such as recognising the characteristics of exceptional students, utilising information technology, and developing appropriate learning methods (Saraswati, 2019).

An important component of inclusive education is the availability of knowledge (Donath et al., 2023) and inclusive leadership (Mbua, 2023), which support teacher satisfaction (Al-Mahdy & Emam, 2025) and increase teaching motivation (Cañoso, 2025). Research indicates that knowledge management has a significant impact on job satisfaction and performance. (Hasballah, 2021), through intra-organisational knowledge sharing being the primary knowledge management process (Kianto et al., 2016), system quality, knowledge quality, user information system competence, and organisational attitudes towards knowledge management (Karlinsky-Shichor & Zviran, 2016).

Knowledge sharing serves as a mediator between teacher motivation and performance, positively impacting their performance by facilitating knowledge exchange (Sidharta, 2023). Knowledge management and leadership are positively related to teacher motivation (Soeprayitno, 2020). Limited access to inclusive knowledge can affect teachers' professional development, so initial provision for prospective inclusive educators can support the development of teaching and teachers themselves (Walton, 2017). Inclusive leadership in inclusive schools involves effective leadership practices and organisational and social conditions that support inclusive education for students with disabilities (DeMatthews et al., 2020). School leadership for inclusion requires making difficult decisions, engaging in purposeful efforts, advocating for change, and employing specific leadership strategies to embed inclusive practices in complex, multicultural schools (Carter & Abawi, 2018).

Several studies have shown a positive relationship between inclusive leadership in educational settings and the promotion of educator optimism and collaboration (Adams et al., 2025), educational quality (Moya et al., 2020), and innovative teaching behaviour (Castillo-Acobo et al., 2022). However, they have not specifically linked inclusive leadership to teacher satisfaction and teaching motivation. Meanwhile, knowledge systems are known to influence teacher satisfaction (Hasballah, 2021; Khoa & Huynh, 2023) and teaching motivation (Sidharta, 2023; Soeprayitno, 2020). Several studies on inclusive primary schools conducted in Indonesia have found that managerial support and career development (Prima, 2024), along with maintenance factors such as policies (Nurahmah

et al., 2019), effectively influence teacher satisfaction and teaching motivation among inclusive educators.

Previous research has not thoroughly examined the impact of inclusive leadership and knowledge systems on teacher satisfaction and teaching motivation, particularly in inclusive education settings. Future research recommends employing mixed methods and exploring inclusive educational areas and environments that offer diverse resources (Prima, 2024). This study reveals the presence of an inclusive knowledge system within the school environment and its influence on teacher satisfaction and teaching motivation among educators involved in inclusive learning. Inclusive leadership in managerial and community aspects was analysed as a moderating variable within the knowledge system, supporting the development of an inclusive school environment and effective management in these schools.

METHOD

Research Approach and Design

The model and variables used in this analysis are based on the study by Khoa & Huynh (2023), which examines the influence of knowledge acquisition (KNA), knowledge dissemination (KND), and knowledge utilisation (KNU) on academic staff or teacher satisfaction (ASS) and teaching motivation (TEM). An exploratory perspective is taken on the role of inclusive leadership in exerting direct and moderating effects, drawing onhe constructs of the inclusive leadership research model (Moya et al., 2020). The construction of the leadership model is divided into two groups: inclusive leadership in shaping the school as an inclusive community (LEDC) and management of teaching-learning processes and development of teaching professionalism (LEDM), as constructed by Moya et al. (2020). Adaptations were made to the construct indicators in response to inclusive education conditions at the primary school level in Indonesia, as well as related policies on inclusive education, particularly those related to technology and daily teaching practices.

The identification also encompassed perceptions of how inclusive education policies are implemented at the primary school level in Bogor City. The main participants in this study included educators involved in inclusive learning, such as school leaders, classroom teachers, shadow teachers (either classroom or personal), and other educational staff within the school community.

Research Location

Bogor City is the third-largest city after Bandung City and Depok City, with the highest proportion of special needs students (0.29%) in Wet Java. Bogor City has six sub-districts, and the highest number of special needs students per sub-district in West Java (48 students out of 282 students). The identification of related regulations shows that the number of learners with special needs in several inclusive primary schools in Bogor City exceeds the allowable limit (more than 15%). Some study groups are indicated to have more than two learners with special needs. Peraturan Wali Kota Bogor No. 70/2017 mandates that all educational units provide inclusive education, but thisas been adopted by only 55 of 282 primary schools (19.5%), according to Dapodik Kemdikbud (2024). A total of 1,254 (26.73%) teachers work across these primary schools.

This condition is supported by the pre-research perceptions, which indicate that inclusive educators in Bogor City need support to access more sustainable inclusive knowledge. Similarly, attention is required for school facilities and infrastructure that need optimisation to foster an inclusive school environment.

Population and Sampling Technique

Slovin's method is used to determine the sample size with a 10% margin of error. Considering representativeness, the sample was drawn from the population of 1,254 primary school educators

in Bogor City, resulting in a minimum sample size of 93 (rounded up to 100). The respondent sample was selected using purposive sampling, comprising 100 educators from 10 inclusive schools with the highest number of students with special needs in Bogor City. The selected inclusive schools included four public and six private primary schools, with a total of 167 teachers and 37 education personnel. The principals of the 10 inclusive schools were also selected as interview and observation respondents. An expert resource person from the Bogor City Education Office supported the decision to recommend appropriate inclusive education policies and implementations.

Research Instrument and Measurement Scale

The research method employed is Structural Equation Modelling - Partial Least Squares (SEM-PLS) analysis, used to evaluate the influence of knowledge systems on teacher satisfaction and teaching motivation, moderated by the principal's inclusive leadership style. Furthermore, an Importance-Performance Mapping Analysis (IPMA) was conducted to identify key factors that are highly significant but perform below optimal levels. These quantitative analyses were performed using SmartPLS 4.

Identification was conducted using questionnaires for quantitative data, and interviews and observations for qualitative data. The questionnaire's identification of suitable indicator constructs was determined through discussions with academic experts. Validity and reliability tests were performed on the draft questionnaire, involving 30 respondents, using SPSS v.27. Based on the test results, 6 out of 65 indicators were found to be invalid and unreliable, as indicated by the observed r-value (0.361) and p-value < 0.05 in the correlation coefficient table, specifically for KNA (2), KND (3), and KNU (1). Consequently, the final indicators used in the study comprised 59 indicators across seven variables: KNA (4), KND (4), KNU (4), ASS (3), TEM (4), LEDC (12), and LEDM (28). Each indicator employed a 5-point Likert scale, ranging from Strongly Disagree (1) to Agree (5).

Research Hypotheses

This research model involves seven variables tested for their direct effects and two variables for moderation. Therefore, based on the adaptation of the research model, 23 hypotheses were formulated: 11 on direct effects and 12 on moderating effects. The variables are shown in Figure 1.

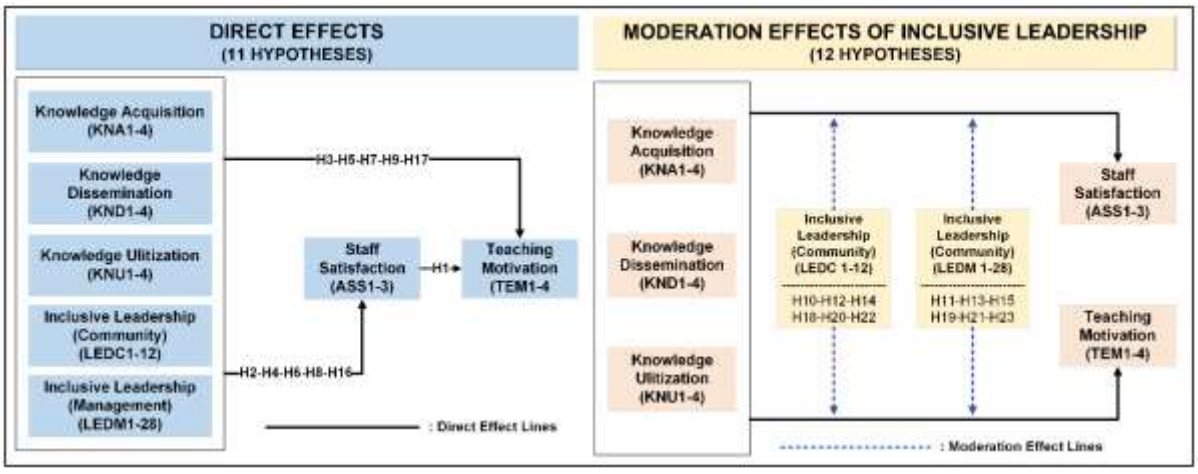

Figure 1: Variables Construct and Hypotheses

This research complements earlier studies on knowledge management and leadership in educational institutions, as well as their influence on teacher satisfaction and motivational factors. However, it offers a distinctive perspective by focusing on academic institutions that organise inclusive education at the primary level. This research examines the role of inclusive knowledge in the realisation of inclusive education.

RESULT AND DISCUSSION

Result

The findings of this study are presented in two parts, focusing on quantitative data processing using Structural Equation Modelling – Partial Least Squares (SEM-PLS) and Importance-Performance Mapping Analysis (IPMA), both conducted with SmartPLS 4.

Data and Perceptions of Inclusive Primary Schools Practices

Demographic data collection for inclusive primary schools includes information on human resources, students, facilities, and infrastructure, as well as activities and programmes related to the inclusive learning process. The data collection utilises a list compiled by the school and designated by respondents. Of 10 inclusive school samples, 5 schools had more than 15% of students with special needs, exceeding the maximum limit for students with special needs in one school in Bogor City.

The number of classroom teachers and education personnel in the 10 inclusive primary schools was 221, with 106 accompanying teachers (shadow teachers). The total number of students in these schools was 2,484, including 311 identified as learners with special needs. The results show that 70% of schools have intervention and stimulation rooms; 50% have therapy support tools such as balls, jumping boards, trampolines, and others; 70% have utilised Individual Learning Programmes (PPI); 60% have internal inclusion guidelines; 90% collaborate with inclusive communities and 40% with schools for students with special needs (SLB); and 70% regularly conduct inclusive evaluations and discussions. Based on interview findings, collaboration between schools through co-teaching and co-learning has not yet been implemented. Some inclusive communities coordinate with several inclusive primary schools. Ikatan Guru Anak Istimewa (KAGUME) is recognised as an exemplary inclusive education community comprising volunteers and inclusive educators from schools in Bogor City.

Inclusive Leadership Perspectives

Respondents included seven principals and three appointed representatives from ten inclusive primary schools, which served as the research sample. To monitor perceptions of implementation and readiness for inclusive education, seven variables were adapted from the Asian Productivity Organisation (APO) Knowledge (2020 General Competencies with Special Competencies (inclusive) indicators, which refer to the overall assessment for primary school teachers and the guidelines for organising inclusive education.

Table 1: Perceptions of Inclusive Schools Readiness

Variabels	Indicators	Modus	Desc.	Mean	Desc.
KM Leadership	S11-S16	5	Strongly Agree	4.533	Strongly Agree
Processes	S21-S26	4	Agree	4.433	Agree
People	S31-S36	5	Strongly Agree	4.483	Agree
Technology	S41-S46	5	Strongly Agree	4.300	Agree
Knowledge Processes	S51-S56	5	Strongly Agree	4.117	Agree
Learning and Innovation	S61-S66	5	Strongly Agree	4.367	Agree
KM Outcomes	S71-S76	4	Agree	4.067	Agree
General Competencies	KU1-KU13	5	Strongly Agree	4.408	Agree
Inclusive Competencies	KK1-KK8	5	Strongly Agree	4.350	Agree

Based on Table 1, Knowledge Management Leadership has the highest mean value at 4.533, while the lowest is in Knowledge Management Outcomes (4.067). Regarding perceptions of the Bogor City Inclusive Education Working Group, all school leaders agreed that Kelompok Kerja Pendidikan Inklusi (Pokja Inklusi) should be reactivated.

Characteristics of Respondents (Inclusive Educators)

The study on the influence of knowledge systems and inclusive leadership on teacher satisfaction and teaching motivation involved inclusive educators as respondents from 10 inclusive primary schools. Data were collected by distributing 156 questionnaires to 167 respondents across these schools, resulting in 141 responses (90.38%). One hundred responses were selected to ensure a representative data sample and completeness of the questionnaires.

Based on the questionnaire data, the respondents were mainly 21-25 years old (36%) and the majority were female (89%). Most respondents held a bachelor's degree (49%) and worked as assistant or shadow teachers (63%), with 1-3 years of experience (42%). A total of 85% of respondents participated in activities to improve inclusion competence, with socialisation being the most popular (50%). The primary source of knowledge about inclusion is the social media group (WAG) for inclusive teachers (72%). Table 2 shows that the mode value for all indicators is 4. The highest mean score is in knowledge acquisition (KNA; 4.19), and the lowest is in knowledge dissemination (KND; 3.77).

Table 2: Modus and Mean Perceptions of Inclusive Educators

Variabels	Indicators	Modus	Desc.	Mean	Desc.
KNA	KNA1-4	4	Agree	4.19	Agree
KND	KND1-4	4	Agree	3.77	Agree
KNU	KNU1-4	4	Agree	4.16	Agree
ASS	ASS1-3	4	Agree	4.14	Agree
TEM	TEM1-4	4	Agree	4.18	Agree
LEDC	LEDC1-12	4	Agree	4.12	Agree
LEDM	LEDM1-28	4	Agree	4.17	Agree

Inner Model Test

Validity Test

The Outer Loading measure is a statistical indicator used to assess how well the indicators reflect the variable or their validity in measuring it. The recommended minimum value for Outer Loading is 0.70 (Hair et al., 2022).

After data processing, of the 59 indicators, 18 had an Outer Loading value <0.70; only the 41 with a value >0.70 were retained. KNA has left only one indicator that meets the criteria, but has the highest overall indicator value (1,000). Interpretations of outer-loading values with a single indicator may differ in their contribution to explaining the construct. Variables with complex indicators are more supportive of validity and reliability; however, a single indicator can also be used if a supporting theory is present (Allen et al., 2022). Other variables have the highest indicator's outer loading on ASS2 (0.873) and the lowest on KNU2 (0.773) (Table 3).

Table 3: Outer Loadings

Indicators	OL	Indicators	OL	Indicators	OL	Indicators	OL
ASS1	0.808	LEDC1	0.761	LEDM7	0.754	LEDM24	**0.805**
ASS2	**0.873**	LEDC2	0.778	LEDM8	0.748	LEDM25	0.774
ASS3	0.840	LEDC3	0.743	LEDM12	0.764	LEDM26	0.749
KNA1	**1.000**	LEDC4	0.740	LEDM13	0.761	LEDM27	0.798
KND1	0.793	LEDC7	0.745	LEDM14	0.799	LEDM28	0.744
KND3	**0.849**	LEDC8	0.751	LEDM17	0.792	TEM1	0.771
KND4	0.729	LEDC9	0.737	LEDM18	0.768	TEM2	0.796
KNU1	0.701	LEDC10	**0.817**	LEDM20	0.729	TEM3	**0.811**
KNU2	**0.773**	LEDM1	0.746	LEDM21	0.797		
KNU3	0.744	LEDM5	0.746	LEDM22	0.722		
KNU4	0.706	LEDM6	0.746	LEDM23	0.749		

Table 4: Indicator's Outer Loadings: Highest Values

Indicators	Descriptions	OL Value
KNA1	The school took my input regarding the inclusive learning process seriously, considered it, and incorporated it into their approach.	1.000
ASS2	Thanks to the school's support for the knowledge system, respondents are happy that all diverse students have equal opportunities to continue their education at their school.	0.873
KND3	My school often hosts academic discussion forums, particularly on knowledge systems related to inclusive learning implementation.	0.849
LEDC10	School leaders encourage the exchange of knowledge about inclusion among school staff, parents, and the community.	0.817
TEM3	Teachers hope that the inclusive learning process in schools will inspire others to develop curiosity and concern, ultimately contributing to inclusive education.	0.811
LEDM24	School leaders encourage the ongoing development of school activities that enhance solidarity, empathy, and assertiveness among students in inclusive classes.	0.805
KNU2	The school prioritises the security of inclusive student data, both internally and externally.	0.773

Table 4 shows that, besides KNA1, ASS2 has the highest outer loading (0.873), making it a strong indicator of its construct. KNU2 has the lowest value, indicating it is the weakest, but still adequate.

Discriminant Validity Test

The Discriminant Validity Value (Fornell-Larcker Criterion) indicates that all research variable constructs meet the desired measurement objectives, with the value of the primary construct being greater than the construct below it (Hair et al., 2022) (see result in Table 5).

Table 5: Fornell-Larcker Criterion

	ASS	KNA	KND	KNU	LEDC	LEDM	TEM
ASS	**0.841**						
KNA	0.450	**1.000**					
KND	0.573	0.378	**0.792**				
KNU	0.639	0.403	0.635	**0.732**			
LEDC	0.441	0.368	0.443	0.635	**0.760**		
LEDM	0.592	0.301	0.484	0.677	0.722	**0.763**	
TEM	0.585	0.464	0.480	0.675	0.620	0.672	**0.793**

Outer Model Test

Hypotheses Test

This research presented 23 hypotheses based on the variable construct and research model (Figure 1). Hypothesis testing in SmartPLS 4 utilised bootstrapping to determine path coefficients. Effects are significant if p-value <0.05 and t-value >1.661.

Table 6: Path Coefficient Values (Bootstrapping)

H	Variables	Original sample	T statistics	t-Table	p-Values	Hypothesis
H1	ASS -> TEM	0.076	0.746	<1,661	0.228	Rejected
H2	**KNA -> ASS**	**0.226**	**2.527**	**>1,661**	**0.006**	**Accepted**
H3	**KNA -> TEM**	**0.237**	**2.358**	**>1,661**	**0.009**	**Accepted**
H4	**KND -> ASS**	**0.246**	**2.095**	**>1,661**	**0.018**	**Accepted**
H5	KND -> TEM	0.016	0.154	<1,661	0.439	Rejected
H6	**KNU -> ASS**	**0.242**	**1.772**	**>1,661**	**0.038**	**Accepted**
H7	KNU -> TEM	0.180	1.321	<1,661	0.093	Rejected
H8	LEDC -> ASS	-0.174	1.481	<1,661	0.069	Rejected
H9	LEDC -> TEM	0.071	0.649	<1,661	0.258	Rejected
H10	LEDC x KNA -> ASS	-0.087	0.734	<1,661	0.231	Rejected
H11	LEDC x KNA -> TEM	0.031	0.237	<1,661	0.406	Rejected
H12	LEDC x KND -> ASS	-0.369	1.626	<1,661	0.052	Rejected
H13	**LEDC x KND -> TEM**	**-0.364**	**2.373**	**>1,661**	**0.009**	**Accepted**
H14	**LEDC x KNU -> ASS**	**0.360**	**1.727**	**>1,661**	**0.042**	**Accepted**
H15	LEDC x KNU -> TEM	0.052	0.310	<1,661	0.378	Rejected
H16	**LEDM -> ASS**	**0.366**	**2.881**	**>1,661**	**0.002**	**Accepted**
H17	**LEDM -> TEM**	**0.312**	**2.660**	**>1,661**	**0.004**	**Accepted**
H18	LEDM x KNA -> ASS	-0.079	0.796	<1,661	0.213	Rejected
H19	LEDM x KNA -> TEM	0.096	0.778	<1,661	0.218	Rejected
H20	**LEDM x KND -> ASS**	**0.366**	**1.709**	**>1,661**	**0.044**	**Accepted**

H	Variables	Original sample	T statistics	t-Table	p-Values	Hypothesis
H21	**LEDM x KND -> TEM**	**0.289**	**1.761**	**>1,661**	**0.039**	**Accepted**
H22	LEDM x KNU -> ASS	-0.280	1.419	<1,661	0.078	Rejected
H23	LEDM x KNU -> TEM	-0.180	1.008	<1,661	0.157	Rejected

The results in Table 6 show that of the 23 hypotheses constructed, 10 were proven to have a significant influence, comprising six direct influences and four moderating influences. Teacher Satisfaction (ASS) was directly and significantly influenced by all KNA (p-value 0.006<0.05), KND (p-value 0.018<0.05), and KNU (p-value 0.038<0.05) as well as LEDM (p-value 0.002<0.05). LEDC moderated the effect of KNU on ASS (p-value 0.042<0.05), while LEDM moderated KND on ASS (p-value 0.044<0.05). Teaching Motivation (TEM) was directly and significantly influenced by KNA (p-value = 0.009 < 0.05) and LEDM (p-value = 0.004 < 0.05). LEDC moderates the effect of KND on TEM (p-value 0.009<0.05), while LEDM moderates the effect of KND on TEM (p-value 0.039<0.05).

Multicollinearity and Effect Size (F^2) Test

The results of the multicollinearity test, using the Variance Inflation Factor (VIF) values, show that all indicators fall within the range of 1,000 to 4,499. Generally, a VIF value below 5 indicates that there are no serious multicollinearity issues in the model (Hair et al., 2022). The multicollinearity test conducted with SmartPLS 4 yielded the lowest value for KNA1 (1,000) and the highest for LEDM12 (4,499), indicating no multicollinearity in the quantitative data used in this study.

F-square is an effect size used to evaluate the influence of exogenous latent variables on endogenous latent variables within a structural model. The F-Square value < 0.02 indicates a weak influence; 0.02 ≤ F-Square < 0.15 signifies a moderate influence; and F-Square ≥ 0.15 denotes a strong influence (Garson, 2016). In the ASS variable, the highest value was found in the influence of LEDM (0.110), and the lowest in the influence of KNA moderated by LEDC (0.007). In the TEM variable, the highest influence was found in KNA (0.106), and the lowest in KND (0.000). Data are shown in Table 7.

Table 7: Effect Size (F^2)

	ASS	Level of Influence	TEM	Level of Influence
ASS			0.007	Weak
KNA	0.090	Moderate	0.106	Moderate
KND	0.082	Moderate	0.000	Weak
KNU	0.048	Moderate	0.030	Moderate
LEDC	0.029	Moderate	0.005	Weak
LEDM	0.110	Moderate	0.084	Moderate
TEM				
LEDM x KND	0.073	Moderate	0.049	Moderate
LEDM x KNA	0.008	Weak	0.013	Weak
LEDC x KNU	0.058	Moderate	0.001	Weak
LEDM x KNU	0.038	Moderate	0.018	Weak
LEDC x KNA	0.007	Weak	0.001	Weak
LEDC x KND	0.065	Moderate	0.069	Moderate

Predictive Relevance (Q^2) Test

The Q^2 Predict value shows that all indicators have positive values, demonstrating that the PLS-SEM model has adequate predictive relevance (Shmueli et al., 2016). The highest Q^2predict values are observed in indicators ASS2 (0.377) and TEM3 (0.341), indicating that these indicators have the strongest predictive power within the model. In contrast, ASS1 (0.190) and TEM1 (0.206) are relatively lower. A comparison with the benchmark model reveals that the RMSE and MAE values in PLS-SEM are consistently lower than those of the linear model (LM) and indicator average (IA) across all indicators. This suggests that PLS-SEM provides better predictive accuracy than alternative models. Therefore, these results support the conclusion that the constructed PLS-

SEM model not only offers good structural estimation but also effectively predicts out-of-sample data (Hair et al., 2022; Shmueli et al., 2016). The results are shown in Table 8.

Table 8: Q-Square

	Q^2predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE	IA_RMSE	IA_MAE
ASS1	0.190	0.654	0.494	0.771	0.598	0.727	0.507
ASS2	0.377	0.608	0.474	0.877	0.629	0.771	0.668
ASS3	0.332	0.600	0.496	0.815	0.612	0.735	0.528
TEM1	0.206	0.524	0.415	0.631	0.489	0.588	0.488
TEM2	0.285	0.538	0.428	0.666	0.509	0.637	0.494
TEM3	0.341	0.551	0.445	0.781	0.569	0.679	0.582

Goodness of Fit Index

SEM-PLS Algorithm analysis presents a graph of Outer Loading, Original Sample, and r-Squares values in Figure 2.

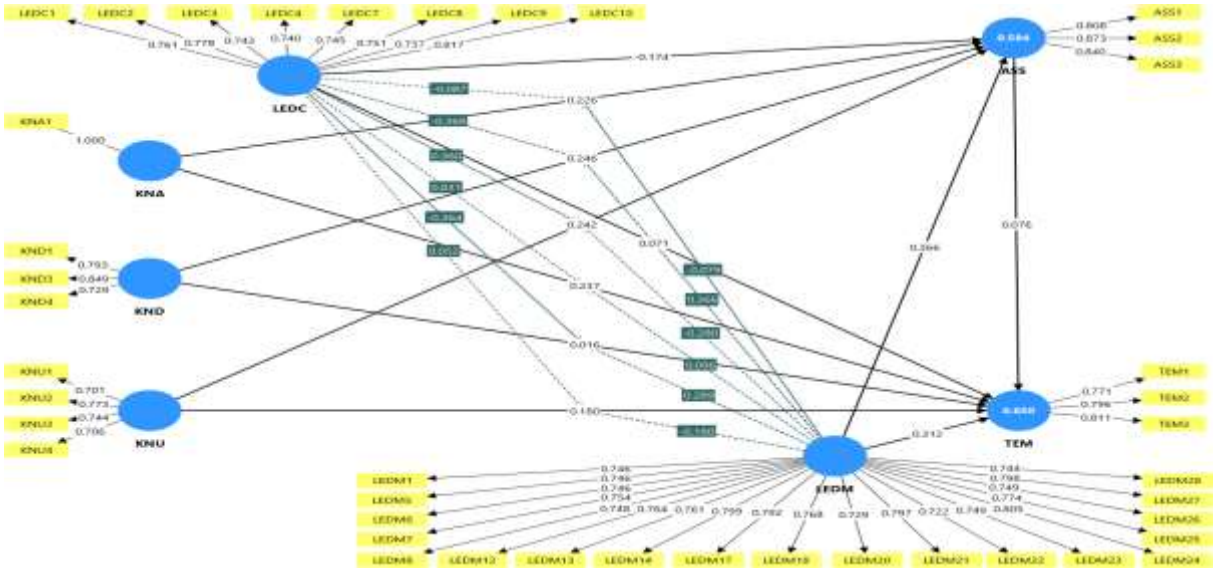

Figure 2: SEM-PLS Algorithm Graphic

Based on the results of SEM PLS data processing using SmartPLS 4, the Cronbach's Alpha value (>0.6), the Average Variance Extracted (AVE) value (>0.5), and the Composite Reliability value (>0.7) indicate that the variables used are valid. KNA did not appear in Table 2 because it only has one indicator remaining after outer loading elimination, with a value of 1,000. The R-square value of ASS (0.594) indicates that the construct variable explains 59.4% of the variation in the teacher satisfaction variable. The other satisfaction factor (40.6%) is attributed to factors not identified in this study. The R-square value for TEM (0.650) indicates that the construct variable explains 65% of the variation in the teaching motivation variable. The other satisfaction factor (35%) is attributed to factors not identified in this study. The test results are presented in Table 9.

Table 9: Goodness of Fit Data

	Cronbach's Alpha	Composite Reliability	AVE	R-Square (R^2)	Goodness of Fit
ASS	0.793	0.879	0.707	0.594	
KNA	0.704	0.834	0.627		
KND	0.710	0.821	0.535		
KNU	0.895	0.916	0.577		
LEDC	0.960	0.964	0.582		
LEDM	0.705	0.835	0.629		
TEM	0.793	0.879	0.707	0.650	0,616

Result of Indirect Effect Test

The results of the specific indirect effect analysis indicate that all mediation pathways through the ASS variable on TEM are insignificant, with p-values > 0.05 and relatively low t-values (< 96) (Sarstedt et al., 2021). Although a direct influence exists between the variables, the overall findings indicate no indirect effect of LEDC and LEDM on ASS and TEM, suggesting that future research model improvements are necessary.

Table 10: Specific Indirect Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
LEDC x KNA -> ASS -> TEM	-0.007	-0.007	0.019	0.350	0.363
LEDC x KND -> ASS -> TEM	-0.028	-0.026	0.043	0.647	0.259
KNA -> ASS -> TEM	0.017	0.020	0.026	0.650	0.258
KND -> ASS -> TEM	0.019	0.021	0.029	0.635	0.263
KNU -> ASS -> TEM	0.018	0.020	0.030	0.603	0.273
LEDC -> ASS -> TEM	-0.013	-0.012	0.021	0.627	0.265
LEDM -> ASS -> TEM	0.028	0.031	0.039	0.710	0.239
LEDM x KND -> ASS -> TEM	0.028	0.025	0.041	0.677	0.249
LEDM x KNA -> ASS -> TEM	-0.006	-0.008	0.017	0.355	0.361
LEDC x KNU -> ASS -> TEM	0.027	0.023	0.040	0.690	0.245
LEDM x KNU -> ASS -> TEM	-0.021	-0.016	0.033	0.640	0.261

Result of Importance-Performance Mapping Analysis (IPMA)

An excellent approach to interpreting and explaining findings from influence tests is the Importance-Performance Mapping Analysis (IPMA), which builds on SEM-S analysis (Hauff et al., 2024). Results are shown in Table 11.

Table 11: Score of Importance-Performance ASS and TEM

Variables	Teacher Satisfaction (ASS)		Teaching Motivation (TEM)	
	Importance	Performance	Importance	Performance
ASS			0.076	71.584
KNA	0.226	69.333	0.254	69.333
KND	0.246	63.544	0.034	63.544
KNU	0.242	72.561	0.198	72.561
LEDC	-0.174	68.590	0.058	68.590
LEDM	0.366	69.589	0.340	69.589
Average	0.181	68.723	0.160	69.200

Based on the IPMA analysis results, the Teacher Satisfaction (ASS) variable has an average importance level of 0.181 and a performance of 68.723. Meanwhile, for Teaching Motivation (TEM), the average importance level is 0.160, and performance is 69.200.

The variables in Quadrant IV of the map analysis indicate variables of high importance but suboptimal performance. Based on data processing, the KND variable in the ASS and the KNA and LEDM variables in the TEM require strategies to improve their performance to support the optimisation of teacher satisfaction and teaching motivation. The results are shown in Figures 3 and 4.

Figure 3: IP Quadrant of ASS

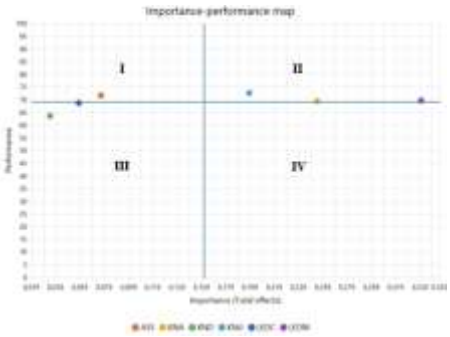

Figure 4: IP Quadrant of TEM

Discussion

This research underscores the importance of inclusive knowledge for implementing inclusive education. Leadership commitment fosters an inclusive environment, and practical strategies to optimise resources can improve teacher satisfaction and motivation. Policy support can also enhance the quality of inclusive education in Bogor City.

School Readiness in Inclusive Education Implementation

Knowledge management efforts are a key focus, with KM Leadership scoring highest (Table 1; mean 4.533). This demonstrates a strong commitment to leadership in documentation, budgeting, policies, and upskilling inclusive educators, as outlined in the school's vision. Principals recognise the potential of knowledge management to optimise resources, create structured systems, leverage technology, and foster innovation. However, a lack of policy support, facilities, and infrastructure, and inconsistent implementation hinder the full realisation of inclusive learning, with resources underused for Knowledge Outcomes (Table 1; mean 4.067). The limited use of technology, policies, and structural issues reduces the effectiveness of inclusive education(Guillén-Martínez et al., 2025).

Some private schools have adopted inclusive education measures, such as hiring inclusive facilitators and regularly assessing learning outcomes. However, public schools have yet to establish inclusive management systems due to financial limitations. As a result, some schools with limited resources are providing inclusive education only by relying on existing staff and inadequate facilities. Several schools collaborate with special needs schools (SLB) and inclusive education communities. Working with SLBs provides essential facilities, such as braille books and stimulation tools, needed by students with special needs. Community collaboration helps schools access inclusive knowledge, with communities assisting with mentor recruitment and facilitating inclusive discussions. These efforts enhance teachers' satisfaction, especially if school leaders adopt creative, transformative management practices (Tang et al., 2023). While a school initiative, it is positive and needs stronger policy support. The presence of shadow teachers (63% of respondents) is importantwithout them, inclusive education services are not optimal (Widodo & Umar, 2020).

Teacher Satisfaction and Teaching Motivation

The perceptions of inclusive educators (Table 2) suggest that knowledge acquisition is an ongoing school policy. Schools have demonstrated a commitment to supporting teachers' aspirations for inclusive education, though this commitment has not been consistently implemented and is poorly documented. The lowest average response was given to support for knowledge dissemination. The lack of school support in the form of policies, mechanisms, and knowledge-sharing facilities is insufficient, significantly affecting the availability of reference materials for teachers in inclusive classrooms. Facilitation and teacher discussions can enhance understanding and foster the development of new knowledge (Triana & Rugaiyah, 2023).

Questionnaire and observation data indicate that the majority of inclusive teacher respondents were female (89%). Interview reveals that female assistant teachers, concerning the characteristics of children with special needs, tend to require a compassionate approach in their interventions. Gender is a significant determinant of attitude, with female teachers demonstrating a more positive outlook towards inclusive education than their male peers (Singh et al., 2025).

The results of the significance test (Table 6) show that teacher satisfaction is significantly affected by the acquisition, dissemination, and utilisation of knowledge (H2; H4; H6). Practices believed to influence teacher satisfaction include recognising ideas and innovations, facilitating and supporting knowledge dissemination, providing access to inclusive knowledge, and using information technology to support inclusive learning. Teacher professional development, course design quality, student engagement, and pedagogical content knowledge all positively impact

teacher satisfaction (Nguyen, 2024). Job satisfaction mediates the relationship between knowledge sharing, performance enhancement, and teaching quality (Abha et al., 2021). Managerial inclusive leadership (H16) acts as a driver by providing facilities and access to uniform inclusive knowledge sharing, as well as organising inclusive activities (Table 4; Outer Loadings; LEDM24). This finding aligns with research (Hu et al., 2024 indicating that teachers' collective innovation acts as a mediator between school climate and job satisfaction.

Inclusive community leadership promotes the use of knowledge in the learning process by fostering active collaboration between schools, parents, and the community (Table 4; Outer Loadings; LEDC10). Teaching motivation is significantly affected by knowledge acquisition and inclusive managerial leadership (H3; H17). Similar to satisfaction, a positive school response to emerging ideas and innovations, as well as well-structured management of inclusive education, is essential in supporting teaching motivation. School support for innovation can foster motivation forearning (Fongkanta & Buakanok, 2025). In terms of moderation, both inclusive community and managerial leadership moderate the effect of knowledge dissemination on teaching motivation. These results suggest that knowledge dissemination is a key concern for inclusive educators, particularly regarding policies under the authority of school leaders to create an optimal environment for knowledge sharing. This aligns with research (Klaeijsen et al., 2018), which shows that teachers' perceptions of the work environment—particularly regarding the satisfaction of basic psychological needs—have a more substantial influence on teachers' intrinsic motivation.

Hypothesis 1 (H1) found that teacher satisfaction did not directly significantly influence teaching motivation (Table 6; H1; p-value 0.228), while the effect size (F^2) also indicated a weak influence of ASS on TEM (Table 7; F^2; 0.007 <0.02; weak). The indicator component revealed that teacher satisfaction was primarily influenced by perceptions of inclusive education management in schools, whereas teaching motivation was linked to teachers' self-assessments of their ability to implement inclusive teaching. Paais & Pattiruhu (2020) show that satisfaction and motivation are not always connected, as leadership and work culture can influence perceptions. School policies on teacher achievement evaluation and management support can improve teacher satisfaction and teaching quality, which, in turn, drives teacher satisfaction (Medlama et al., 2025), whereasechnical skills and pedagogical understanding do not have a significant effect (Nguyen, 2024). Meylasari & Qamari (2017) indicate that motivation affects the willingness to share knowledge, which can, in turn, indirectly influence school policies. However, some studies have shown that teacher satisfaction does impact teaching motivation (Khoa & Huynh, 2023). Nonetheless, differences in culture and country lead to varying research outcomes (Nguyen, 2024).

Hypothesis 13 (Table 6) shows a negative Original Sample value (-), indicating a reverse effect of TEM on the moderating role of LEDC on KND. The higher the motivation of inclusive teachers to teach, the greater their influence on strengthening inclusive community leadership that supports the dissemination of inclusive knowledge in managing inclusive education. This aligns with the research of Nurahmah et al. (2019), which finds a significant relationship between motivation factors and teacher satisfaction. Ataliç et al. (2016) approach using Herzberg's Two Factor Theory shows that teacher motivation primarily depends on the fulfilment of Hygiene factors (salary, interpersonal relations, supervision, company policy, working conditions; personnel life; status; job security) rather than Motivators (recognition; achievement; possibility of growth; advancement; responsibility, work itself). In-depth interviews in this study revealed that teachers understand the limitations of school resources in implementing inclusive education. They find the humanitarian aspect of providing equal education for students with special needs to be their primary motivation, which drives them to promote inclusive school practices.

Moderation of Inclusive Leadership's Role

The results of the significance tests indicate that three out of four key moderators of inclusive leadership (Table 6; H13; H20; H21) are associated with knowledge dissemination (KND), whilst

only one moderates the other variable, specifically knowledge utilisation (KNU; H14). The commitment of school leaders to inclusive education and knowledge management is seen as vital in providing clear direction and guidance for the execution of inclusive educators' duties and roles. These findings are corroborated by research from Ilyas et al. (2024) and Utami et al. (2024), which confirmed that inclusive leadership significantly influences job satisfaction. Perceived satisfaction remains below optimal levels due to a lack of strong leadership encouragement to share knowledge about inclusion. Meanwhile, transformational leadership practices are likely to foster a favourable organisational climate and promote inclusive management practices (Tang et al., 2023).

Observations reveal that public inclusive primary schools struggle to access essential inclusive knowledge. Budget constraints and strict regulations hinder schools' ability to recruit inclusive facilitators. Furthermore, the absence of uniform guidelines for implementing inclusive education results in unmet needs for inclusive knowledge that serve as a learning reference. In this context, initiatives in inclusive leadership are necessary to improve access to the knowledge required by inclusive educators. Collaboration with inclusive communities and special needs schools (SLB) can be achieved at minimal cost by encouraging parental participation. Inclusion communities and partnerships in inclusive knowledge training are seen as meeting educators' personal needs, thereby motivating them to implement inclusive practices in their learning. According to Ahuja & Yadav (2023), transformational leadershisignificantly influences teacher motivation, with this influence primarily mediated by training in inclusive education. Facilitating access to inclusive knowledge through training can enhance teachers' motivation to deliver inclusive education. The leadership style and initiative demonstrated by the principal can foster teacher motivation and elevate the quality of learning (Yalçınkaya et al., 2021).

Inclusive Knowledge and Teacher Outcomes Development Strategy

The IPMA analysis results indicate that knowledge dissemination is a crucial yet underperforming factor supporting teacher satisfaction. Teaching motivation needs to be enhanced in terms of knowledge acquisition and inclusive managerial leadership, even though knowledge acquisition is seen as ongoing. Improvements should focus on schools' responsive practices for considering and recording teacher input and aspirations.

Indicators that enhance the performance of knowledge dissemination and acquisition, as well as managerial inclusive leadership, include documenting ideas and innovations, facilitating academic discussion forums, providing inclusive data storage, establishing mechanisms for collecting input and aspirations, and offering a knowledge portal as a reference for inclusive learning materials. This strategy aims to maintain and improve teacher satisfaction and the motivation of inclusive educators.

The observation results generally suggest that inclusive primary schools still need support in implementing inclusive education. Facilities and infrastructure are not yet fully supportive and safe for inclusive student activities. Collaboration between inclusive schools remains limited, leading each school to adopt a different approach to inclusive education. Researchers aimed to understand school leaders' perceptions of the feasibility of implementing inclusive co-teaching and co-learning strategies through interview sessions. They believe that the concepts of co-teaching and co-learning can be solutions for building collaboration in implementing inclusive education and promoting inclusive knowledge management within the school environment.

Developing collaboration between special education and general education teachers is essential to manage students' activities and improve teachers' ability to deliver effective instruction(Alsudairy, 2024). Teachers involved in a working group or learning community focused on education for sustainable development (ESD) tend to have higher levels of competence (Isac et al., 2022).

Generally, inclusive schools are prepared to implement inclusive education. However, inclusive education demands not only school readiness but also suitable policies and continuous support. Public schools often face resource limitations, making cooperation and collaboration essential to promote access to inclusive knowledge and effective inclusive learning strategies. School leaders recognise the importance of uniform understanding and guidance for implementing inclusive education and thus urge the government to develop policies and guidelines to support this goal. The existence of Pokja Inklusi, dedicated explicitly to inclusion, is seen as facilitating communication and coordination that connect the interests of all schools practising inclusive education.

CONCLUSION

This study complements research on the contributions of knowledge system management and inclusive leadership to teacher satisfaction and teaching motivation in inclusive educational environments, particularly at the primary school level. Managerial inclusive leadership is the variable with the most significant direct influence on teacher satisfaction and motivation to teach. Knowledge dissemination is the variable that predominantly influences the moderating effect of both managerial and community-inclusive leadership. These results highlight the important role of school leaders in implementing inclusive education policies.

With proper identification of inclusion resources and a clear inclusion knowledge management system, schools can optimise the potential of existing resources and enhance access to knowledge within inclusion activist communities. Perspectives from educators and leaders of inclusive primary schools suggest that inclusive work teams, such as Pokja Inklusi in Bogor City, are essential bridges for communication and coordination among stakeholders involved in implementing the inclusive education programme. In the short term, policies promoting collaborative co-teaching and co-learning strategies can serve as effective alternatives for sharing knowledge and experiences in inclusive education. These policies engage inclusive care communities as a dynamic source of inclusive expertise. These findings and perspectives contribute to the development of inclusive education by identifying inclusive knowledge in Indonesia.

This research is semi-exploratory, using variables adapted from studies in other fields, which may have different policy backgrounds, research targets, and cultural contexts for implementing inclusive education in Indonesia. This research found that teacher satisfaction did not significantly affect teaching motivation, prompting further investigation in related studies. Future research should focus on developing and testing indicator patterns more closely aligned with Indonesia's inclusive education culture and on assessing how the inclusion knowledge system impacts the competence of inclusive educators.

Recommendations

Interviews with expert respondents from the Bogor City Education Office discussed suitable strategic actions to enhance the quality of inclusive education in Bogor City, emphasising access to inclusive knowledge. This study suggests several practical strategies that the Bogor City Education Office, as the policymaker, and primary schools providing inclusive education, as stakeholders, can implement, considering available resources and other identified technical support. The recommended policy strategies are: (1) Re-optimizing the Inclusive Education Working Group; (2) Preparing guidelines for implementing inclusive education; (3) Developing a work programme for managing educational knowledge; (4) Establishing collaboration with the inclusive education activist community; and (5) Designing a work programme for inclusive leadership in mentoring the implementation of inclusive education in Bogor City. The managerial strategy recommendations are: (1) Providing knowledge sharing facilities within the school environment; (2) Establishing documentation mechanisms and managing aspirations, ideas, and innovations; (3) Optimising the

function of the school's internal inclusive management structure; (4) Strengthening cooperation with SLB and inclusive education activist communities; and (5) Collaborating on inclusive learning methods (e.g., co-teaching and co-learning).

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BIBLIOGRAPHY

Abha, A., Astuti, W., & Triatmanto, B. (2021). The effect of knowledge sharing on teacher performance mediated by teacher job satisfaction in vocational high school in Malang City. *International Journal of Environmental Sustainability, and Social Sciences*, *2*(1), 31–35. https://doi.org/https://doi.org/10.38142/ijesss.v1i3.51

Ahuja, J., & Yadav, M. (2023). The influence of transformational leadership on teacher motivation towards more inclusive education. *Journal of Business, Ethics, and Society*, *3*(2), 45–60. https://doi.org/DOI:10.61781/3-2II2023/3bmlm

Allen, M. S., Iliescu, D., & Greiff, S. (2022). Single item measures in psychological science: A call to action. In *European Journal of Psychological Assessment* (Vol. 38, Issue 1, pp. 1–5). Hogrefe Publishing GmbH. https://doi.org/10.1027/1015-5759/a000699

Al-Mahdy, Y. F. H., & Emam, M. M. (2025). Fostering teacher satisfaction and job involvement to support inclusive education. *Journal of Research in Special Educational Needs*. https://doi.org/10.1111/1471-3802.70008

Alsudairy, N. A. (2024). Effects of a training program to improve co-teaching and collaboration skills for in-service teachers of special and general education. *SAGE Open*, *14*(4). https://doi.org/10.1177/21582440241288076

Ataliç, H., Can, A., & Cantürk, N. (2016). Herzberg's motivation- hygiene theory applied to high school teachers in Turkey. *European Journal of Multidisciplinary Studies*, *1*(4), 90. https://doi.org/10.26417/ejms.v1i4.p90-97

Biro Komunikasi dan Hubungan Masyarakat. (2025, August 5). *Kemendikdasmen Dorong Pendidikan Profesi Guru Cetak Guru Kompeten untuk Pendidikan Inklusif*. Kementerian Pendidikan Dasar Dan Menengah.

Carter, S., & Abawi, L. A. (2018). Leadership, inclusion, and quality education for all. *Australasian Journal of Special and Inclusive Education*, *42*(1), 49–64. https://doi.org/10.1017/jsi.2018.5

Castillo-Acobo, Y. R., Ramírez, A. A. V., Teves, R. M. V., Orellana, L. M. G., Quiñones-Negrete, M., Sernaqué, M. A. C., Valdivieso, J. V. P., Chávez, C. M. R., Gonzáles, J. L. A., Carranza, C. P. M., Aponte, M. B. H., & Cáceres-Chávez, M. del R. (2022). Mediating role of inclusive leadership in innovative teaching behavior. *Eurasian Journal of Educational Research*, *100*, 18. https://doi.org/10.14689/ejer.2022.100.002

DeMatthews, D., Billingsley, B., McLeskey, J., & Sharma, U. (2020). Principal leadership for students with disabilities in effective inclusive schools. In *Journal of Educational Administration* (Vol. 58, Issue 5, pp. 539–554). https://doi.org/10.1108/JEA-10-2019-0177

Donath, J. L., Lüke, T., Graf, E., Tran, U. S., & Götz, T. (2023). Does professional development effectively support the implementation of inclusive education? A meta-analysis. *Educational Psychology Review*, *35*(1). https://doi.org/10.1007/s10648-023-09752-2

Fongkanta, P., & Buakanok, F. S. (2025). School supportiveness and innovative abilities in vocational education: the mediating role of motivation to innovate among vocational teachers. *Frontiers in Education*, *10*. https://doi.org/10.3389/feduc.2025.1487560

Guillén-Martínez, D., Alcázar-Espinoza, J. A., Rámirez-Sánchez, I., Samaniego-Cobo, T., & Villacís-Macias, C. (2025). Policies, assistive technologies, and barriers in inclusive education: A global systematic review (2019-2024). *Journal of Posthumanism*, *5*(2). https://doi.org/10.63332/joph.v5i2.418

Hair, J. F., Hult, J. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd Edition). Thousand Oaks: Sage.

Hasballah, M. A. (2021). The influence of knowledge management on lecturer performance through job satisfaction. *Management Science Letters*, *11*, 959–964. https://doi.org/10.5267/j.msl.2020.10.001

Hauff, S., Richter, N. F., Sarstedt, M., & Ringle, C. M. (2024). Importance and performance in PLS-SEM and NCA: Introducing the combined importance-performance map analysis (cIPMA). *Journal of Retailing and Consumer Services*, *78*. https://doi.org/10.1016/j.jretconser.2024.103723

Hu, B., Park, K. H., & Xu, Z. (2024). The mediating effect of teachers' collective innovativeness between school climate and job satisfaction. *European Journal of Educational Research*, *13*(4), 1573–1585. https://doi.org/10.12973/eu-jer.13.4.1573

Ilyas, U., Sohail, A., Ashraf, A., & Rehman, A. (2024). The influence of inclusive leadership on employee work engagement: examining the mediating path of job satisfaction. *Migration Letters*, *21*(S7), 1746–1758. https://doi.org/10.59670/ml.v21is7.9190

Isac, M. M., Sass, W., Pauw, J. B. De, De Maeyer, S., Schelfhout, W., Van Petegem, P., & Claes, E. (2022). Differences in teachers' professional action competence in education for sustainable development: The importance of teacher co-learning. *Sustainability (Switzerland)*, *14*(2). https://doi.org/10.3390/su14020767

Kamble, A. D., & Gaikwad, H. V. (2021). How should the education system approach children with special needs? *Indonesian Journal of Community and Special Needs Education*, *1*(1), 15–18. https://doi.org/10.17509/ijcsne.v1i1.39154

Karlinsky-Shichor, Y., & Zviran, M. (2016). Factors influencing perceived benefits and user satisfaction in knowledge management systems. *Information Systems Management*, *33*(1), 55–73. https://doi.org/10.1080/10580530.2016.1117873

Kementerian Pendidikan dan Kebudayaan. (2024). *Data Pokok Pendidikan*. Dapodik Kemdikbud. [KEMDIKBUD] Dasbor Peserta Didik Berkebutuhan Khusus, Kemdikbud, https://referensi.data.kemdikbud.go.id/berkebutuhan_khusus/home

Khoa, B. T., & Huynh, T. T. (2023). The effectiveness of knowledge management systems in motivation and satisfaction in higher education Institutions: Data from Vietnam. *Data in Brief*, *49*, 109454. https://doi.org/10.1016/j.dib.2023.109454

Kianto, A., Vanhala, M., & Heilmann, P. (2016). The impact of knowledge management on job satisfaction. *Journal of Knowledge Management*, *20*(4), 621–636. https://doi.org/10.1108/JKM-10-2015-0398

Klaeijsen, A., Vermeulen, M., & Martens, R. (2018). Teachers' innovative behaviour: The importance of basic psychological need satisfaction, intrinsic motivation, and occupational self-efficacy. *Scandinavian Journal of Educational Research*, *62*(5), 769–782. https://doi.org/10.1080/00313831.2017.1306803

Mbua, E. M. (2023). Principal leadership: Raising the achievement of all learners in inclusive education. *American Journal of Education and Practice*, *7*(1), 1–25. https://doi.org/10.47672/ajep.1313

Medlama, M., I Gusti Ayu, Desta, M. S., & Erawanto, S. (2025). An empirical study on the teacher satisfaction and motivation on the teaching performance: A case of Papua Pegunungan Province of Indonesia. *Journal of Digitainability, Realism & Mastery (DREAM)*, *4*(03), 18–25. https://doi.org/10.56982/dream.v4i03.304

Meylasari, U. S., & Qamari, I. N. (2017). Faktor-faktor yang mempengaruhi knowledge sharing dalam implementasi e learning. *Jurnal Manajemen Bisnis*, *8*(2), 238–263. https://journal.umy.ac.id/index.php/mb/article/view/3949

Moya, E. C., Molonia, T., & Cara, M. J. C. (2020). Inclusive leadership and education quality: Adaptation and validation of the questionnaire "inclusive leadership in schools" (LEI-Q) to the Italian context. *Sustainability (Switzerland)*, *12*(13). https://doi.org/10.3390/su12135375

Nguyen, T. H. C. (2024). Exploring the role of atificial intelligence-powered facilitator in enhancing digital competencies of primary school teachers. *European Journal of Educational Research*, *13*(1), 219–231. https://doi.org/https://doi.org/10.12973/eu-jer.13.1.219

Nurahmah, F., Ekawati, E., & Jayanti, S. (2019). Analisis faktor yang mempengaruhi kepuasan kerja berdasarkan Herzberg two factors theory pada guru di Sekolah Luar Biasa Negeri Semarang. *Jurnal Kesehatan Masyarakat*, *7*(4), 348-353. https://doi.org/https://doi.org/10.14710/jkm.v7i4.24472

P. Cañoso, M. J. (2025). Teachers' motivation, self-efficacy, and competence in teaching in an inclusive classroom. *International Multidisciplinary Research Journal*, *6*(4). https://doi.org/10.54476/ioer-imrj/004112

Paais, M., & Pattiruhu, J. R. (2020). Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *Journal of Asian Finance, Economics and Business*, *7*(8), 577–588. https://doi.org/10.13106/jafeb.2020.vol7.no8.577

Prima, A. (2024). Integrasi manajemen strategis dan kebijakan penyelenggaraan sekolah dasar inklusi dalam mengatasi burnout pada implementasi kurikulum merdeka. *Alifbata: Jurnal Pendidikan Dasar*, *4*(2), 49–66. https://doi.org/https://doi.org/10.51700/alifbata.v4i2.752

Ron Young. (2020). *Knowledge management tools and techniques manual*. Asian Productivity Organization (APO). https://doi.org/https://doi.org/10.61145/coee1851

Saraswati, A. (2019). Pengembangan sistem manajemen pengetahuan kompetensi guru (Studi kasus: SMK Pembangunan Bogor). *Repository.Ipb.Ac.Id*. https://repository.ipb.ac.id/handle/123456789/97465

Sari, C. N., & Hendriani, W. (2021). Hambatan pendidikan inklusi dan bagaimana mengatasinya: Telaah kritis sistematis dari berbagai negara. *Jurnal Ilmiah Psikologi Terapan*, *9*(1), 97. https://doi.org/10.22219/jipt.v9i1.14154

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In *Handbook of Market Research* (pp. 1–47). Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8_15-2

Shmueli, Ray, Estrada, V., & Chatla. (2016). The elephant in the room: Predictive performance of PLS models. *Journal of Business Research*, *16*(10), 4552–4564.

Sidharta, I. (2023). Effect of motivation on teacher performance: mediating role of knowledge sharing. *Jurnal Ekonomi, Bisnis & Entrepreneurship*, *17*(1), 183–194. https://doi.org/10.55208/jebe.v17i1.363

Singh, R., Jain, V. K., & Yadav, S. (2025). Attitude of secondary school teachers towards inclusive education. *International Journal of Research-Granthaalayah*, *13*(3). https://doi.org/10.29121/granthaalayah.v13.i3.2025.6037

Sitanggang, A. R., Puteri, A., Nduru, E. Br., Fazira MT, E., Anggriana, F., Nainggolan, I. Br., Siregar, M. R., Tanslionva, L., & Ningsih, W. D. (2025). Optimalisasi pendidikan inklusi di indonesia : tantangan, permasalahan, dan strategi peningkatan mutu. *Jurnal Nakula : Pusat Ilmu Pendidikan, Bahasa Dan Ilmu Sosial*, *3*(2), 217–234. https://doi.org/10.61132/nakula.v3i2.1675

Soeprayitno. (2020). The relationship between knowledge management, leadership style, and work motivation: Evidence from an Islamic boarding school. *International Journal of Business and Society*, *21*(2), 945–954. https://doi.org/10.33736/ijbs.3304.2020

Tang, Y., Wareewanich, T., & Yue, X. G. (2023). The impact of organizational inclusion on teachers' internal motivation for professional development in vocational colleges: The case of China. *Problems and Perspectives in Management*, *21*(3), 138–152. https://doi.org/10.21511/ppm.21(3).2023.11

The World Bank. (2022). *Inclusive Education*.

Triana, T., & Rugaiyah, R. (2023). Tacit knowledge sharing to improve teachers' performance. *Jurnal Akuntabilitas Manajemen Pendidikan*, *11*(1), 49–56. https://doi.org/10.21831/jamp.v11i1.56741

Utami, B. Y., Nelitawati, & Al-Kadri, H. (2024). The influence of principal transformational leadership on teacher performance and learning quality in schools. *International Journal of Educational Dinamics*, *6*(2), 555–559. https://doi.org/10.70177/ijen.v3i2.2154

Walton, E. (2017). Inclusive education in initial teacher education in South Africa: practical or professional knowledge? *Journal of Education*, *67*. https://doi.org/https://doi.org/10.17159/2520-9868/i67a05

Widodo, A., & Umar, U. (2020). Inclusive primary schools without shadow teachers: can learning services be optimal? *Jurnal Educative: Journal of Educational Studies*, *5*(2), 149. https://doi.org/10.30983/educative.v5i2.3196

Yalçınkaya, S., Dağlı, G., Aksal, F. A., Gazi, Z. A., & Kalkan, Ü. (2021). The effect of leadership styles and initiative behaviors of school principals on teacher motivation. *Sustainability (Switzerland)*, *13*(5), 1–19. https://doi.org/10.3390/su13052711

Zhu, J., & Wang, L. (2010). Humble opinions on inclusive educational idea. *International Education Studies*, *3*(3), 32–35. https://doi.org/10.5539/ies.v3n3p32