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The Governance Of Education Report Card In Improving Numeracy Skills Of Senior High School Students (A Case Study At Sman 1 Kawali And Sman 1 Panawangan)

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Abstract

The low numeracy achievement of Indonesian students has encouraged the use of the Education Report Card (Rapor Pendidikan) as a basis for school quality evaluation, yet its use depends on school-level governance. This study aims to describe, analyze, and compare the governance of the Education Report Card in improving students' numeracy skills at SMAN 1 Kawali and SMAN 1 Panawangan using the Educational Governance framework. A qualitative multi-site case study involved 12 informants; data were collected through in-depth interviews, observation, and documentation, analyzed using an interactive model, and verified through source and technique triangulation. The Education Report Card served as a steering instrument that legitimized numeracy priorities in school budgeting. Both schools delegated authority to teams established by principal decrees: the Co-curricular Team in Kawali focused on module design and teacher mentoring, while the Academic Ability Test (TKA) Team in Panawangan focused on diagnostic instruments. Teacher resistance was addressed through informal collegial coordination, national data were cross-checked with internal diagnostic assessments, and contextual support emphasized printing facilities in Kawali and schedule adjustments in Panawangan. Teaching shifted from formula memorization toward contextual problem-solving (High Order Thinking Skills). Numeracy scores in the Education Report Card rose from 58.4 to 71.2 in Kawali and from 55.9 to 68.5 in Panawangan, while internal diagnostic assessments showed fewer students below the minimum level. These descriptive findings indicate that report card governance supported by team delegation, collegial communication, data triangulation, and

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logistical support can encourage instructional improvement, although causal claims cannot be drawn.

Keywords: Educational Governance, Education Report Card, Numeracy Skills, Multi-site Case Study.

INTRODUCTION

The transformation of Indonesia's education evaluation system through the National Assessment (Asesmen Nasional) policy and the launch of the Education Report Card (Rapor Pendidikan) platform marks an important paradigm shift in evaluation. The orientation of evaluation, which was previously punitive and based on high-stakes testing, has now shifted toward formative evaluation centered on continuous quality improvement at the institutional level. The Education Report Card was specifically designed as a comprehensive data-based reflection instrument for educational units. Its purpose is to help school leaders identify the root causes of learning problems, plan measurable improvements, and allocate budgets in a well-targeted manner (Permendikbudristek Nomor 9 Tahun 2022; Kemendikbudristek, 2022).

Nevertheless, the availability of this big data-based instrument has not been matched by tangible improvements in the quality of learning in the field, particularly in numeracy indicators. Analysis of the 2022 Programme for International Student Assessment (PISA) data release reveals a worrying reality: only 18% of Indonesian students reached at least Level 2 in mathematics, meaning that most students were below the minimum competency threshold (OECD, 2023). This stagnation in achievement indicates that policy interventions designed at the macro level (the central government) have not been fully translated into micro-level governance practices in educational units.

This condition reveals a gap between policy expectations and empirical reality in the field. Conceptually, the Education Report Card should function as a steering instrument capable of coordinating the entire school community in formulating synergistic improvement strategies. In practice, however, the use of the Education Report Card in schools still faces obstacles, including low pedagogical data literacy and a heavy administrative burden (Karuna & Mudarya, 2026), as well as platform recommendations that are considered insufficiently specific to school conditions (Asropi, 2024). Beyond administrative constraints, efforts to improve numeracy often run up against sectoral egos in the teachers' room, namely the tendency to place responsibility for

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numeracy on teachers of exact science subjects such as Mathematics, Physics, or Chemistry, whereas numeracy development should be carried out across the curriculum by every subject teacher (Tenny et al., 2022; Geiger et al., 2015). The assumption that numeracy is not the responsibility of teachers of social studies, language, or humanities subjects creates a deadlock in the division of authority, the allocation of teaching time, and the provision of material resources, so that teachers outside the exact sciences tend to be reluctant or feel they lack the capacity to integrate numeracy into their teaching modules.

In this study, numeracy is understood not merely as basic arithmetic skills or the memorization of formulas, but as the ability to think using mathematical concepts, procedures, facts, and tools to solve contextual problems in everyday life, whose development needs to take place across subjects (Tenny et al., 2022). The governance of the Education Report Card is read through the lens of Educational Governance theory (Altrichter et al., 2007; Altrichter, 2010), which focuses on the coordination of action among actors at various levels and on steering within the education system. Drawing on this framework, this study examines five dimensions of governance, namely steering instruments, actor constellations, coordination of action, knowledge and information, and contextual conditions, to understand how Education Report Card data are translated into action at the school level.

Relevant previous studies can be grouped into three tendencies. The first tendency, as seen in the studies by Asropi (2024) and Karuna and Mudarya (2026), portrays the use of the Education Report Card at the school level and its constraints. The second tendency places the learning achievement crisis at the level of the system and macro policy. Beatty et al. (2021) showed that progress in school participation in Indonesia in 2000-2014 was not followed by improvements in mathematics achievement, and that learning achievement even declined, while Molato-Gayares et al. (2022) outlined strategies for recovering from learning loss caused by school closures in Asia and the Pacific, such as measuring students' learning levels, teaching at the right level, and teacher training. The third tendency examines particular elements of school governance. Spillane et al. (2004) view school leadership as a practice distributed among leaders, followers, and the situation (distributed leadership), whereas Schildkamp (2019) showed that the use of data for school improvement is influenced by system, organizational, team, and individual factors, with data literacy and leadership acting as both the main enablers and the main barriers.

These studies have provided valuable understanding of the barriers to data use, teacher quality, macro policy, and several elements of school governance. However, as the review above

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shows, each study highlights particular barriers or elements of governance. How these elements work together when schools respond to Education Report Card data, from priority setting, role arrangement, negotiation of workloads, and information management to logistical support, remains under-examined, in line with Schildkamp's (2019) observation that how to stimulate the enablers and remove the barriers to data use in schools is still poorly understood. In the literature search conducted, studies comparing how two schools with different institutional patterns operationalize the same evaluation data are also still limited.

Building on this gap, this study opens the "black box" of institutional governance at the meso level (school management and leadership) and the micro level (implementing teachers in the classroom) through the lens of Educational Governance. The contribution of this study lies in a comparative analysis of two institutional models, namely the establishment of the Co-curricular Team (Tim Kokurikuler) at SMAN 1 Kawali and the Academic Ability Test (Tes Kemampuan Akademik/TKA) Team at SMAN 1 Panawangan, to examine the dynamics of actor constellations and the role of informal coordination networks in overcoming resistance to change among teachers. This study does not view the Education Report Card solely from the technical side of instructional evaluation, but from the perspective of the division of authority, the negotiation of workloads, and budgeting legitimacy that affect the implementation of numeracy learning, and it relates these dynamics descriptively to the schools' numeracy achievement.

Therefore, this study aims to describe, analyze, and compare the governance process of the Education Report Card in efforts to improve students' numeracy skills at SMAN 1 Kawali and SMAN 1 Panawangan. More specifically, this study seeks to answer how the Education Report Card is used as a steering instrument, how the actor constellation is arranged, how coordination of action, knowledge and information, and contextual conditions are managed, and how the process of improving students' numeracy skills unfolds in both schools, along with the similarities and differences between them. The findings are expected to serve as a consideration in formulating an adaptive managerial model for educational units in similar contexts.

RESEARCH METHODOLOGY

This study was conducted using a qualitative approach by adopting a multisite case study design (Yin, 2018). This methodological design was deliberately chosen because the main purpose of the study was not oriented toward testing hypotheses through statistical measurement, but rather toward exploring, understanding, and comparing in depth the complexity of social

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interaction dynamics and education policy governance within their natural setting. Through the multi-site approach, the researchers did not merely isolate a single phenomenon but were able to conduct cross-case comparisons to see how the same policy (the Education Report Card) was responded to differently by two distinct school organizational cultures (Miles et al., 2014). The comparison between SMAN 1 Kawali and SMAN 1 Panawangan is expected to produce theoretical conclusions that are stronger and more comprehensive and that can be transferred to similar contexts regarding the application of Educational Governance in secondary schools.

The research subjects were not determined randomly but by means of rigorous purposive sampling (Patton, 2015). The inclusion criteria for informants were based on their command of information, their decision-making authority, and their direct empirical involvement in formulating and executing policies to improve numeracy literacy in their respective schools. The key informants covered a broad spectrum of actors in order to obtain a holistic view, namely 12 people, consisting of 6 people at each site. At SMAN 1 Kawali and SMAN 1 Panawangan, the informants included the principal as the holder of the highest policy authority and budget authorizer; the vice principal for curriculum as the designer of academic programs; the School Operational Assistance (Bantuan Operasional Sekolah/BOS) treasurer as the verifier and executor of program financing; the head of the special team (the Co-curricular Team in Kawali and the TKA Team in Panawangan) together with one cross-subject team member teacher who designed teaching modules; and the guidance and counseling (Bimbingan dan Konseling/BK) teacher. The BK teacher was interviewed because of their involvement in cross-checking Education Report Card data with internal diagnostic assessments. Informant codes were used to maintain data traceability, namely KS (principal), WK (vice principal for curriculum), BB (BOS treasurer), KT (team head), GT (team teacher), and BK (BK teacher), followed by the site marker KW (Kawali) or PW (Panawangan), for example KS-KW. The research site was specifically centered on SMAN 1 Kawali and SMAN 1 Panawangan, Ciamis Regency, West Java Province.

The data collection procedure was carried out systematically through three main qualitative techniques designed to complement and validate one another in order to meet the standards of qualitative data trustworthiness (triangulation). First, semi-structured in-depth interviews. This technique allowed the researchers to explore hidden motives, schemes of authority distribution, and policy negotiation processes among actors that are often not written in official documents. Second, non-participant observation, in which the researchers directly observed the dynamics of informal coordination in the teachers' room, the conduct of official

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meetings, and problem-solving-based teaching practices in the classroom. Third, an intensive documentation study in the form of an analytical review of the school's Education Report Card Dashboard, the principal's decrees (Surat Keputusan/SK) on team formation, the School Activity and Budget Plan (Rencana Kegiatan dan Anggaran Sekolah/RKAS), a pedagogical review of the cross-disciplinary numeracy teaching modules developed by teachers, the pre- and post-diagnostic numeracy assessment reports prepared by the BK teacher, and the school's numeracy scores on the Education Report Card Dashboard for 2023, 2024, and 2025.

To process the qualitative data collected from the field, this study applied the interactive model of data analysis developed by Miles, Huberman, and Saldaña (2014). The analysis was operationalized at two parallel levels, namely within-case analysis to understand the uniqueness of each school, followed by cross-case analysis to identify cross-case patterns. These analytical steps took place in three stages. First, data condensation, in which interview transcripts and field notes were filtered, summarized, and focused on the six dimensions that were the focus of the study, namely the five governance dimensions of the Educational Governance framework (steering instruments, actor constellations, coordination of action, knowledge and information, and contextual conditions) and the process of improving students' numeracy skills. Second, data display, realized in the form of descriptive narrative text and cross-case categorization matrices to facilitate comparison. Third, conclusion drawing and verification. Numeracy achievement data from the Education Report Card Dashboard and diagnostic assessments were presented descriptively as supporting data, without statistical testing. Verification was carried out through source triangulation, namely comparing the accounts of informants with different roles on the same focus, and technique triangulation, which matched interview results with observation notes and documents to minimize researcher interpretation bias, in line with the credibility criteria in qualitative research (Lincoln & Guba, 1985).

RESULTS AND DISCUSSION

Results

This section presents in detail the empirical findings obtained directly from the field at SMAN 1 Kawali and SMAN 1 Panawangan based on the five governance dimensions and the process of improving students' numeracy skills. These data were gathered through in-depth interviews, observation, and documentation study and then condensed to present a portrait of both research sites. A summary comparison of the two schools is presented in Table 1.

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1. Steering Instruments in Education Report Card Governance

Based on the field findings, SMAN 1 Kawali and SMAN 1 Panawangan both took managerial steps to focus their institutional programs on increasing numeracy capacity in response to the "red report card" from the ministry. School leaders at both sites used the data listed in the Education Report Card Dashboard as their primary basis for argument. The principals used these quantitative data to legitimize the shifting of budget items and to authorize the disbursement of School Operational Assistance (BOS) funds in the preparation of the School Activity and Budget Plan (RKAS). The principal of SMAN 1 Kawali stated, "We make the Education Report Card Dashboard our main basis. Without those numbers, budget meetings always turn into debates. Because the numeracy indicator was red, we shifted the RKAS priorities." (KS-KW). A similar view was expressed by the principal of SMAN 1 Panawangan, "The Education Report Card serves to legitimize budget decisions; we can't allocate BOS for numeracy without that data as a basis." (KS-PW). Observation of the start-of-year staff meeting showed that the principal displayed the Education Report Card Dashboard, and the decision to prioritize numeracy was made without a vote. The RKAS document also stated "Priority program: Cross-Subject Numeracy Strengthening; basis: 2024 Education Report Card numeracy indicator; allocation: module duplication, teacher training, diagnostic assessment."

2. Actor Constellation (Stakeholders) in Education Report Card Governance

The empirical findings show a decentralization of authority in which efforts to improve numeracy were no longer placed unilaterally on mathematics teachers. The principal of SMAN 1 Kawali delegated coordinating authority to the Co-curricular Team, while SMAN 1 Panawangan delegated it to the Academic Ability Test (TKA) Team. In both schools, the operational legality of these special teams was formally bound through the issuance of a principal's decree (SK) recorded in the institutional administration. The principal of SMAN 1 Kawali emphasized, "I don't want numeracy to be loaded only onto the Mathematics teachers. I formed the Co-curricular Team through a decree; they do the coordinating." (KS-KW). The principal of SMAN 1 Panawangan stated, "We formed the TKA Team through a decree; its job is to develop instruments and provide cross-subject mentoring." (KS-PW). The decree at SMAN 1 Kawali established the Co-curricular Team, which was "tasked with designing cross-subject numeracy modules and mentoring teachers", whereas the decree at SMAN 1 Panawangan established the Academic Ability Test (TKA) Team, which was "tasked with developing diagnostic instruments and

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learning follow-up". Observation showed that the decrees were posted or filed in the curriculum office, and the team names were listed in the duty structure.

3. Coordination of Action in Education Report Card Governance

Observation and interviews revealed that the implementation of learning transformation in the field gave rise to resistance and complaints from teaching staff regarding additional administrative workloads. However, the field findings show that school leaders and the heads of the special teams avoided rigid hierarchical instructions in the staff meeting forum. They chose an affective collegial approach through casual lobbying and personal conversations in the teachers' lounge. The head of the Co-curricular Team at SMAN 1 Kawali explained, "In formal meetings, teachers resist because they feel their workload is being increased. We lobby personally in the teachers' room and ask one teacher to be the example first." (KT-KW). The vice principal for curriculum at SMAN 1 Panawangan said, "We use collegial networks; the numeracy apperception time was agreed on without hierarchical pressure." (WK-PW). Observation showed that after formal meetings, the principal and team heads talked informally with teachers in the lounge without any written, sanction-toned instructions. Field notes also recorded that the agreement to integrate a 5-10 minute apperception period emerged from collegial discussion, not from a written order.

4. Knowledge and Information in Education Report Card Governance

Data and information management in both schools shows that macro data from the central government were not accepted uncritically. At SMAN 1 Panawangan, these external data were cross-checked (triangulated) with the results of diagnostic assessments developed by the guidance and counseling (BK) teacher. This diagnostic knowledge was then distributed and used as a baseline for teachers in designing classroom learning scenarios. The BK teacher at SMAN 1 Panawangan explained, "We cross-check the Education Report Card data with the BK diagnostic assessment; teachers use the results to map students' weaknesses in logic." (BK-PW). The vice principal for curriculum at SMAN 1 Kawali said something similar, "We don't swallow central data raw; we triangulate it with internal diagnostics." (WK-KW). The diagnostic report of SMAN 1 Kawali recorded "Pre-assessment mean 52.3; 61% of students below the minimum level; weakest domain: interpretation of data and graphs." A triangulation matrix of the Education Report Card and the BK diagnostic assessment was also used in curriculum meetings.

5. Contextual Conditions in Education Report Card Governance

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The data describe that the demand for cross-subject integration of numeracy literacy carried logistical consequences. The leaders of both schools modified the contextual conditions (*Kontextbedingungen*) with different emphases, including guaranteeing the availability of paper and broad access to the school printers for mass duplication of modules at SMAN 1 Kawali, and adjusting the numeracy apperception schedule so as not to burden teachers' time at SMAN 1 Panawangan. The BOS treasurer at SMAN 1 Kawali stated, "We make sure paper and printers are available; without them teachers can't possibly make modules." (BB-KW). Meanwhile, the vice principal for curriculum at SMAN 1 Panawangan explained, "The 5-10 minute numeracy apperception schedule was agreed on so it wouldn't add to teachers' workload." (WK-PW). Observation showed that access to the school printers was opened widely for module duplication and that the apperception schedule was posted in the teachers' room. The RKAS document included the item "Spending on paper, toner, duplication of numeracy modules, and short teacher training."

6. The Process of Improving Students' Numeracy Skills

Findings in the classrooms show a shift in teaching methods, in which rote learning of formulas began to be abandoned and replaced by a cross-subject contextual problem-solving approach (High Order Thinking Skills) supported by the special teams. Pedagogical interventions were also adjusted to the map of students' weaknesses in basic logic. A team member teacher at SMAN 1 Kawali said, "It used to be memorizing formulas; now it's contextual problems, real data, and students are asked to reason." (GT-KW), while a team member teacher at SMAN 1 Panawangan stated, "Numeracy comes in at the start of the lesson; HOTS questions across subjects." (GT-PW). Classroom observation showed that teachers presented contextual data in the form of tables or graphs, and students then discussed how to interpret them without being given formulas directly. The teaching module included the activity "reading a table of household electricity consumption, calculating the average, interpreting the trend, and proposing recommendations."

The achievement data show that the Education Report Card numeracy score of SMAN 1 Kawali increased from 58.4 in 2023 to 71.2 in 2025, while that of SMAN 1 Panawangan increased from 55.9 to 68.5. Internal diagnostic assessments also showed an increase in the mean from 52.3 to 67.9 in Kawali and from 50.8 to 65.4 in Panawangan (Table 2).

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Table 1. Comparison of Education Report Card Governance at SMAN 1 Kawali and SMAN 1 Panawangan

No	Dimension	SMAN 1 Kawali	SMAN 1 Panawangan
1	Steering Instruments	The Education Report Card was used as the main basis for setting numeracy priorities in the RKAS	The Education Report Card was used to legitimize BOS allocation decisions for numeracy programs
2	Actor Constellation (Stakeholders)	The Co-curricular Team (SMAN 1 Kawali) was established through a principal's decree (SK)	The Academic Ability Test (TKA) Team (SMAN 1 Panawangan) was established through a principal's decree (SK)
3	Coordination of Action	Personal lobbying in the teachers' room and asking one teacher to serve as an example	Using affective collegial networks to agree on integrating numeracy apperception time in class
4	Knowledge and Information	Education Report Card data were triangulated with internal diagnostic assessments; diagnostic reports mapped students' weakest domains	The Education Report Card Dashboard was triangulated (cross-checked) with internal diagnostic assessments by the BK teacher

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No	Dimension	SMAN 1 Kawali	SMAN 1 Panawangan
5	Contextual Conditions	Infrastructure modification, ensuring paper availability, and broad access to printers for module printing	Adjusting time and lesson hours so that the cross-disciplinary teaching workload does not burden teachers
6	Numeracy Improvement Process	Contextual problems based on real data replaced formula memorization (HOTS)	Embedding numeracy material in the opening minutes of regular lessons across disciplines

Data source: Researchers' analysis (2026)

Table 2. Numeracy Achievement of SMAN 1 Kawali and SMAN 1 Panawangan, 2023-2025

School	Education Report Card numeracy score 2023	2024	2025	Change 2023-2025	Pre-diagnostic	Post-diagnostic	Students below minimum level: pre → post
SMAN 1 Kawali	58.4 (Moderate)	64.7	71.2 (Good)	+12.8	52.3	67.9	61% → 38%
SMAN 1 Panawangan	55.9 (Moderate)	61.8	68.5 (Good)	+12.6	50.8	65.4	64% → 41%

Data source: Education Report Card Dashboard and schools' internal diagnostic assessments, processed by the researchers (2026)

DISCUSSION

This section analyzes all of the above empirical findings using Educational Governance theory as the analytical lens (Altrichter et al., 2007). The theory is applied through three main

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functions: describing reality, explaining the rationality of action, and predicting an adaptive governance model.

1. Analysis of Steering Instruments

The empirical finding that the Education Report Card was used as the main basis of legitimacy in setting program priorities reflects the operation of the complexity reduction function, or *Komplexitätsreduktion*, in the Educational Governance framework (Altrichter et al., 2007). In the context of school governance, the central macro data platform acts as a steering instrument that reduces uncertainty. The presence of quantitative data from the central government appeared to help dampen debates in meetings to determine priority programs, as expressed by KS-KW and as seen in the priority decisions made without a vote. With this steering instrument, institutional focus could be aligned on solving numeracy literacy problems, so that the school's program and financial decisions could be executed in a more directed manner. This finding is in line with Karuna and Mudarya (2026), who showed that programs in the RKAS refer to the recommendations of Education Report Card indicators. Nevertheless, Mandinach and Schildkamp (2021) caution that data use should not be reduced to fulfilling accountability but should be directed toward school improvement goals, so the budget legitimation function needs to be accompanied by instructional follow-up, as seen in the subsequent dimensions.

2. Analysis of Actor Constellation

The school leaders' policy of forming the Co-curricular Team and the TKA Team through the legal basis of principal's decrees (SK) explains the importance of rearranging the actor constellation and applying the principle of distributed leadership (Spillane et al., 2004). From a governance perspective, academic innovation cannot be placed partially on individual teachers but requires a solid meso-level institutional structure. The issuance of these formal decrees can be understood as an affirmation of the clarity of the teams' roles and tasks amid regular teaching loads, so that the numeracy agenda has clearly responsible parties. This pattern is in line with the review by Harris (2008), which links distributed leadership to organizational change in schools, and with Leithwood et al. (2020), who affirm the positive impact of distributed leadership on school and student achievement. In these two schools, this distribution was formally institutionalized through principal's decrees, but with different task focuses: the Co-curricular Team at SMAN 1 Kawali was directed toward module design and teacher mentoring, whereas the TKA Team at SMAN 1 Panawangan was directed toward developing diagnostic instruments and learning follow-up.

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3. Analysis of Coordination of Action

The phenomenon in which school leaders and the special teams preferred informal lobbying in the teachers' room to imposing rigid instructions in formal meetings illustrates the concrete form of the mechanism of interest negotiation, or *Aushandlungsprozesse*, in institutional dynamics (Altrichter et al., 2007). Effective coordination of action cannot be built solely on hierarchical structural compliance. The findings indicate that changes in teachers' teaching practices rested on mutual trust, in which the use of informal network communication channels appeared more effective in reducing psychological resistance and dissolving sectoral egos among teachers. This finding is in line with Bryk and Schneider (2002), who showed that schools with high relational trust are more likely to try new practices, and with Daly et al. (2010), who found that teachers' social networks are related to the uptake, depth, and spread of change. These informal channels worked in different ways: at SMAN 1 Kawali they were used to persuade teachers through peer role models, whereas at SMAN 1 Panawangan they produced an agreement on the numeracy apperception schedule.

4. Analysis of Knowledge and Information

The practice of triangulating macro Education Report Card data with the results of the BK teacher's internal diagnostic assessments explains the functioning of local knowledge production, or *Wissensproduktion*, in reducing pedagogical uncertainty at the micro level (Altrichter et al., 2007). This information management reflects the principle of evidence-based management (Schildkamp, 2019). By comprehensively combining national evaluation data with the mapping of students' cognitive profiles, the instructional interventions designed by teachers became better targeted and aligned with the map of students' weaknesses in basic logic. This practice is in line with Mandinach and Gummer (2016), who view teachers' data literacy as the ability to transform various types of data into knowledge and instructional steps, and with Datnow and Hubbard (2016), who emphasize that data use needs to be decoupled from external accountability demands and to involve diverse information about student learning.

5. Analysis of Contextual Conditions

The leaders' managerial actions in modifying infrastructural and logistical aspects, such as providing facilities for mass printing of modules and adjusting schedules, explain that the success of cross-disciplinary innovations and programs depends on creating contextual conditions (Kontextbedingungen) and a conducive, supportive work environment. This is in line with Leithwood et al. (2020), who state that school leadership improves learning indirectly by

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improving classroom and school conditions, and with Hallinger and Heck (2010), who found that collaborative leadership affects student learning through strengthening school capacity. By taking over operational logistical barriers through securing institutional budget allocations, the schools reduced grounds for refusal stemming from limited facilities. The emphasis differed between the two schools, namely module duplication facilities at SMAN 1 Kawali and the adjustment of apperception time at SMAN 1 Panawangan.

6. Analysis and Prediction of the Numeracy Improvement Process

The transformation of classroom teaching methods toward a contextual problem-solving approach (High Order Thinking Skills) reflects a more directed pedagogical intervention. The increases in the Education Report Card numeracy scores and diagnostic results in both schools (Table 2) are consistent with this shift, although the descriptive data in this qualitative design do not allow causal relationships to be drawn. This direction is in line with Geiger et al. (2015), who showed that a cross-curricular numeracy approach can help students develop a critical orientation toward real-life situations, including through subjects other than mathematics. Based on the accumulated dynamics of all these governance dimensions, within the Educational Governance framework it can be predicted that the sustainability of numeracy improvement in the future should no longer depend on merely reactive, incidental programs. For this upward trend in quality to be consistent and stable, school management needs to permanently institutionalize and integrate the cycle of data triangulation and diagnostic assessment into curriculum Standard Operating Procedure (SOP) documents and annual planning.

CONCLUSION

The governance of the Education Report Card at SMAN 1 Kawali and SMAN 1 Panawangan shows that national evaluation data can be translated into school action when the five governance dimensions support one another. The Education Report Card functions as a steering instrument that legitimizes numeracy priorities in the RKAS. The actor constellation was arranged through special teams formed by principal's decrees, with different focuses: the Co-curricular Team at SMAN 1 Kawali on module design and teacher mentoring, and the TKA Team at SMAN 1 Panawangan on diagnostic instruments and learning follow-up. Teacher resistance to additional workloads was managed through informal collegial communication rather than hierarchical instruction. Education Report Card data were cross-checked with internal diagnostic assessments, while support for contextual conditions differed in emphasis, namely the availability

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of module duplication facilities at SMAN 1 Kawali and the adjustment of the numeracy apperception schedule at SMAN 1 Panawangan. In the learning process, teaching shifted from formula memorization to cross-subject contextual problem-solving. The increases in numeracy scores and internal diagnostic results indicate that Education Report Card governance supported by delegation of authority, informal collegial coordination, triangulation of diagnostic data, and logistical support can encourage instructional improvement. However, because the research design is qualitative, claims of generalization and statistical causality should be avoided; these findings are more appropriately read as an adaptive managerial model that requires further testing.

This study is limited to two public senior high schools in Ciamis Regency using a qualitative approach, and the numeracy achievement data are presented descriptively without statistical testing. For school leaders, these findings suggest the need to institutionalize the cycle of cross-checking Education Report Card data with diagnostic assessments in annual planning so that it does not depend on particular leaders. For education offices or their branch offices, the pattern of forming special teams through decrees and informal collegial communication can serve as a consideration in mentoring schools with similar contexts. Future research is recommended to examine the collaboration of social sciences and humanities teachers in developing numeracy modules, and to test the relationship between school intervention funding allocations and National Assessment numeracy achievement through a longitudinal quantitative design.

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