School Leadership Support in Advancing Action Research Activities among Administrators and Teachers in Belaga District, Sarawak

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ABSTRACT: This study aims to identify the level of school leadership support in promoting a culture of action research among administrators and teachers in the Belaga District. Based on a sample of 242 respondents, findings indicate that the level of leadership support is moderately high (M = 3.369, SD = 1.144). Demographic data reveal that the majority of respondents are regular academic teachers (72.7%), with most serving between 1 to 5 years (50.0%). The analysis highlights elements such as guidance, providing platforms for sharing research findings, and recognition for researchers as significant factors in enhancing teachers' self-efficacy in research. The study concludes that strategic leadership support can drive a more sustainable culture of research in rural schools.

KEYWORDS: Culture of action research in school, School leadership support, Strategic leadership support and Sustainable culture of research in rural schools.

INTRODUCTION

In the increasingly complex world of education, school leadership plays a crucial role in fostering innovation, including the empowerment of a research-oriented culture. Action research is a critical element in this effort as it enables teachers to solve problems scientifically and improve their professional practices (Kemmis & McTaggart, 2000). However, the implementation of research among teachers often relies on leadership support, particularly in rural areas such as Belaga.

This study aims to assess the level of leadership support in schools in the Belaga District and its relationship with elements such as self-efficacy and attitudes toward research. Considering unique challenges such as infrastructure limitations and teachers' workload, leadership support is regarded as a key catalyst in embedding research practices within schools. Aligned with the Malaysia Education Blueprint (MEB) 2013–2025, which emphasizes student outcomes and teacher quality improvement, fostering a research culture at the school level is a strategic step to enhance pedagogical practices. The MEB highlights school leaders as agents of change, focusing on instructional leadership that guides teachers to improve their practices using data and research (Ministry of Education Malaysia, 2013). In the context of rural schools, such as those in the Belaga District, proactive leadership becomes even more critical given the infrastructure challenges and professional development gaps that are more pronounced.

Furthermore, initiatives like KOMPAS 2.0, designed to strengthen school performance through the capacity-building of teachers and management, emphasize the need to establish a research ecosystem within schools. This ecosystem not only supports teachers in conducting research but also fosters innovation, aligning with the MADANI principle of "*creative empowerment*." This principle calls on leaders to promote critical thinking and innovation, ensuring that research efforts translate into more effective classroom practices. It is also consistent with the goal of creating an organizational culture rooted in continuous learning and student-focused improvement.

BACKGROUND OF THE STUDY

School leadership plays a pivotal role in driving a research culture within schools through strategic initiatives. School leaders are not only responsible for providing direction but also for creating a conducive ecosystem for research implementation. Emphasizing professional development for teachers through training programs, such as Continuous Professional Development (CPD), is critical for enhancing teachers' knowledge and capacity in conducting action research. Hashim et al. (2020) found that teacher professional development led by instructional leadership significantly boosts teachers' motivation to actively engage in research activities, particularly in rural areas of Malaysia.

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Additionally, school leaders can encourage collaborative engagement in research as part of the Professional Learning Community (PLC) approach. PLCs provide a platform for teachers to share best practices while being guided to conduct research collaboratively. Rahman and Yunus (2021) highlighted that collaboration among teachers in action research deepens their understanding of students' learning needs and the effectiveness of teaching strategies. This initiative strengthens professional relationships between teachers and leaders, fostering a datadriven working culture.

Moreover, school leaders must ensure that directives to conduct research are seen not as a burden but as an opportunity for teachers to engage in pedagogical innovation. Ismail et al. (2019) indicated that clear leadership support through directives and guidance reduces teachers' anxiety about research and encourages them to experiment with evidence-based practices. When combined with ongoing monitoring, these directives ensure that research conducted is not only exploratory but also impactful on student learning outcomes.

Finally, an integrated effort to establish a research ecosystem within schools requires investments in facilities and resources, including the appointment of mentors and the provision of platforms to share research findings. School leaders who systematically offer this support act as catalysts for successful research cultivation within schools. Abdullah and Ali (2022) observed that schools led by research-oriented leaders reported improvements in teaching quality, which directly contributed to student achievements.

PROBLEM STATEMENT

Although action research has been recognized as an effective approach to improving teaching and learning quality, its implementation in rural schools, such as those in Belaga, faces significant challenges. One of the primary issues is time constraints often mentioned by teachers. They must balance teaching responsibilities, attending packed school programs, and conducting research simultaneously. Rahman and Ali (2021) noted that rural teachers frequently struggle to allocate time for research due to additional responsibilities, including extracurricular management and community involvement—challenges that are also prevalent in Sarawak.

Additionally, inadequate infrastructure in remote schools poses a major obstacle. Schools in areas like Belaga often rely on generators for electricity, while poor internet connectivity limits access to online research resources. Noor and Hussain (2020) highlighted that weak infrastructure is a significant barrier to fostering a research culture in rural settings. This situation restricts teachers' ability to access reference materials, participate in online training, or disseminate their research findings broadly.

A lack of structured guidance in conducting action research also remains a critical issue. Teachers are frequently unaware of how to execute research properly following systematic cycles. Hashim et al. (2020) emphasized that practical training and mentoring on action research are essential to empower teachers to implement and document their findings effectively. Furthermore, difficulties in producing reports that meet required standards have been a considerable hindrance, limiting the potential application of their research outcomes.

Lastly, limited resource allocations, including storage space and basic facilities such as rooms for health and environmental management materials, constrain efforts to conduct research. Abdullah and Ahmad (2019) argued that investing in facilities and resources is vital to establishing a sustainable research ecosystem in schools. This lack of allocation underscores the need for more effective school leadership to holistically plan and support research activities.

The lack of a research culture among teachers and school administrators in various international contexts is a pressing issue, particularly in action research. Teachers often perceive action research as an added burden, hindered by time constraints, a lack of training, and insufficient institutional support. For instance, in the United States, a study by Zeichner (2003) highlighted that many educators struggle to integrate research activities into their daily routines due to the absence of structured guidance and time allocations. Similarly, in the United Kingdom,

McAteer (2013) noted that while action research is a potential tool for enhancing professional practice, its success heavily depends on the establishment of a supportive school leadership that fosters collaboration and resource availability. These findings emphasize the importance of strategic leadership in embedding action research as part of professional responsibilities.

Furthermore, schools in rural and underprivileged settings face additional barriers to cultivating a research culture. Research in Australia by Sachs (2016) demonstrated that limited access to professional development opportunities and resources in remote schools has led to significant disparities in the adoption of action research practices. This issue is compounded by a lack of collaboration and mentorship, which are critical for fostering a research culture. Leaders who prioritize resource allocation and actively involve teachers in reflective practices have been shown to mitigate these challenges (Kemmis et al., 2014). The global perspective underscores the need for sustained efforts by educational leaders to overcome structural and cultural barriers that inhibit the institutionalization of action research in schools.

Research Objectives

1. To identify the level of support provided by school leadership to school managers and teachers in promoting action research activities in schools within the Belaga district.

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2.   To gather respondents' feedback on the challenges encountered that make action research activities difficult to implement as intended.

Research Questions

1.   What is the level of support provided by school leadership to school managers and teachers in promoting action research activities in schools within the Belaga district?
2.   How do respondents describe the challenges they face that hinder the effective implementation of action research activities as intended?

Research Design

This study adopts a quantitative approach with a descriptive design to assess the level of school leadership support in fostering research culture among teachers and school managers in the Belaga district. A descriptive approach was employed to capture respondents' perceptions of leadership support levels. This design is suitable for illustrating the current realities on the ground in the context of action research implementation (Creswell, 2014).

Data on leadership support, derived from interview findings about the challenges respondents face in conducting research, offer insights into the obstacles and constraints encountered by school managers and teachers in Belaga district schools. These findings serve as input and reflection material for school leaders to optimize their support, helping to address these challenges effectively.

Sample Selection

The study population comprises 409 teachers and school managers from two secondary schools and 13 primary schools in the Belaga district. Stratified random sampling was employed to ensure representation across respondent categories, including senior assistant teachers, department heads, subject coordinators, and regular academic teachers. The final sample included 242 respondents, exceeding the minimum sample size recommended by Krejcie and Morgan (1970) for this population size, thereby ensuring data validity. The selection also accounted for demographic variations such as work experience, job roles, and school locations.

Research Instrument

The survey instrument was adapted from the *Research Cultural Questionnaire* (Köksal & Razı, 2011) and the *Cultivating Research Culture Inventory* (Samosa, 2021). It includes sections on respondent demographics, support for research activities, and concerns regarding research implementation.

Data Analysis

Descriptive statistics were used to analyze data, summarizing leadership support levels through mean scores and standard deviations. The analysis revealed that leadership support was categorized as moderately high (M = 3.369, SD = 1.144), providing an accurate depiction of the current state of school leadership in advancing action research in Belaga district schools. Additionally, the analysis of concerns about research activities highlighted factors contributing to teachers' and managers' hesitations, which serve as barriers to research implementation. Thematic analysis was conducted using interview transcripts to identify critical challenges faced by respondents in implementing research activities. This qualitative approach illuminated significant aspects of the barriers and provided a deeper understanding of the factors impeding research culture development in schools.

LITERATURE REVIEW

Harris (2012) explains that effective leadership can encourage school managers and teachers to engage in research, potentially improving student learning outcomes. Leithwood and Riehl (2003) outline key traits of successful leadership, including support for sustained research efforts as a critical foundation for enhancing professional practices among teachers and managers. In the school context, managers such as Senior Assistants (Academic, Student Affairs, and Co-curricular), Subject Heads, and Coordinators play pivotal roles in fostering a research-oriented environment.

Kemmis *et al.* (2014) emphasize the importance of leadership in supporting engagement among managers and teachers to ensure research effectiveness and relevance for educational improvement. This support can take the form of guidance, encouragement, reinforcement, facilities, and attentiveness. Fullan (2021) highlights the need for leadership to provide the necessary encouragement and resources for action research, empowering teachers to improve classroom instructional processes and increase student engagement. Such an approach is particularly relevant for fostering a collaborative climate where reflection and transformative change can occur.

Yusof *et al.* (2021) argue that effective leadership support builds trust and motivates teachers to engage in meaningful research practices. Similarly, Hoy and Miskel (2012) assert that leadership providing emotional support and adequate resources is instrumental in promoting quality teacher involvement in research activities.

Sahlberg (2024) acknowledges that Finland's education system offers robust support for school managers and teachers conducting research and acting on reflective practices, with school administration support being a key factor in achieving educational

transformation. Darling-Hammond and Richardson (2019) recognize that supportive leadership enhances management and teaching quality through data-driven improvements and targeted interventions. Earl and Timperley (2022) stress that leadership plays a central role in driving research activities by motivating managers and teachers to undertake research.

Blase and Blase (2020) explored teachers' perceptions of school leadership's role in promoting reflective teaching strategies, emphasizing the need for leaders to guide managers and coordinators in action research for management and instructional improvements. Day and Sammons (2018) note that effective school leadership influences all teaching staff levels, including senior assistants and department heads, encouraging reflective practices and action research participation. Onwuegbuzie and Wilson (2003) found that statistical anxiety is a significant barrier to teacher research, as many educators feel unconfident in their statistical skills. Similarly, Papanastasiou (2005) highlights that a lack of formal training in research methodologies often leaves school managers and teachers apprehensive about conducting research.

Klassen et al. (2011) identified workload and time constraints as contributors to research anxiety among teachers, who often feel overwhelmed by balancing teaching responsibilities and research activities. Parker et al. (2005) noted that teachers are frequently anxious about uncertainty in research processes, particularly in data collection and analysis. DeVaney (2010) points out that fear of failure is a major factor discouraging teachers from initiating research, as they worry about not achieving desired outcomes.

According to Slate et al. (2002), teachers with limited research experience are more likely to experience anxiety, while Mertler (2009) indicates that this anxiety can negatively impact teaching quality by reducing confidence in applying research findings. Creswell and Plano Clark (2017) observed that research anxiety hinders teachers from engaging in professional development, especially in learning new research methods.

Leech and Onwuegbuzie (2008) argue that research anxiety among teachers often stems from a lack of resources and support, particularly concerning technology and tools required for research. McCarthy et al. (2016) emphasize that tackling complex research issues without sufficient experience exacerbates stress and anxiety, further discouraging teachers from conducting meaningful studies.

Research Findings

Respondents were selected using cluster sampling to represent each school in the Belaga district. The demographic information of the respondents is as follows:

Table 1: Respondent Demographics

Item	Category	Frequent	Percentage
1.	**I work at the following school**		
	SMK Belaga	7	2.9
	SMK Bakun	72	29.8
	SK Long Gang	31	12.8
	SK Long Urun	15	6.2
	SK Batu Keling	18	7.4
	SK Uma Sambop	10	4.1
	SK Tegulang	11	4.5
	SK Long Segaham	11	4.5
	SK Abun Matu	13	5.4
	SK Airport	11	4.5
	SK Nanga Telawan	7	2.9
	SK Lusong Laku	13	5.4
	SK Punan Ba	8	3.3
	SK Long Busang	5	2.1
	SK Metalun	10	4.1
2.	**I have served at this school for...**		
	Less than 1 year	16	6.6
	1 to 5 years	121	50.0
	6 to 10 years	54	22.3
	11 to 15 years	27	11.2
	16 to 20 years	16	6.6
	More than 20 years	8	3.3

3.	**My position at this school is...**		
	Senior Assistant	**33**	**13.6**
	Head Department	**2**	**0.8**
	Subject Head	**30**	**12.4**
	Regular Academic Teacher (GAB)	**176**	**72.7**
4.	**Number of research projects conducted...**		
	No research conducted	**172**	**71.1**
	One action research	**49**	**20.2**
	Two action research projects	**17**	**7.0**
	Three action research projects	**3**	**1.2**
	More than three action research projects	**0**	**0**
5.	**Does the school leader provide support?**		
	Yes	**223**	**92.1**
	No	**19**	**7.9**
6.	**Gender**		
	Male	**128**	**52.9**
	Female	**114**	**47.1**

Leadership Support in Promoting Research Activities

Based on item 5 in the respondent demographics section, a general question was asked regarding whether school leaders provide support for research activities in schools. Out of 242 respondents, 223 confirmed that school leaders do provide support for driving research activities within the school. This response gives a general overview of the situation and the reality in the schools surveyed. Borko, Jacobs, and Koellner (2010) emphasized that although teachers receive support from leaders, time constraints due to heavy workloads often hinder them from engaging in action research.
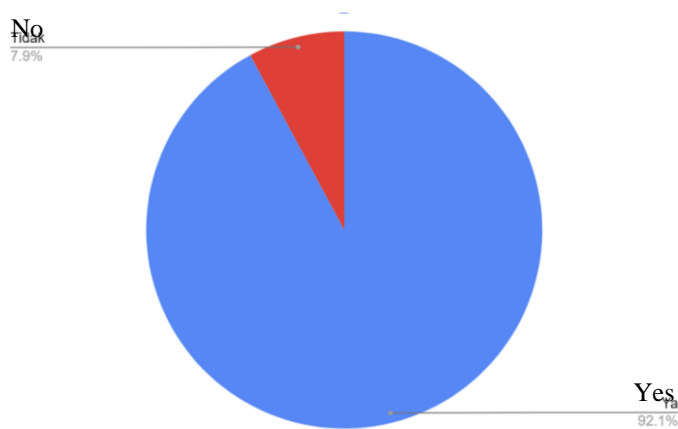

No
7.9%

Yes
92.1%

Figure 1: Leadership Support for Research Activities

As shown in Figure 1 above, leadership support for research activities reached 92.1%, while the findings regarding the number of research projects conducted revealed that 71.1% had not undertaken action research. What, then, is the reason for this discrepancy? Despite the acknowledged support from school leaders towards administrators and teachers, why is action research not being implemented? To answer this question, we will examine the aspects of research anxiety and the challenges faced in carrying out action research. Before that, let us look at the data on leadership support for driving action research activities in more detail, focusing on the types of support provided, as shown in the following Table 2.

Table 2: Leadership Support for Action Research Activities

No.	Item	SP	MIN	Findings
1.	Provides instructions to conduct research	1.026	3.628	MH
2.	Provides guidance for conducting research	1.029	3.400	MH
3.	Provides facilities to conduct research	0.989	3.227	MH

4.	Grants permission to attend external seminars	1.899	3.661	MH
5.	Frequently inquires about the status of the research	1.024	3.331	MH
6.	Actively participates in the research team	1.048	3.269	MH
7.	Continuously monitors the research being conducted	1.042	3.260	MH
8.	Appoints a mentor to assist in completing the research	1.256	3.264	MH
9.	Provides a platform to share research findings	1.050	3.347	MH
10.	Rewards the research team	1.074	3.306	MH
	Overall Score	1.144	3.369	MH

The researcher uses the interpretation scale for the mean score presented by Nunnally and Bernstein (1994), as shown below:

Table 3: Mean Score Interpretation

Skor Min	Interpretasi
1.00 hingga 2.00	Low (L)
2.01 hingga 3.00	Low Moderate (LM)
3.01 hingga 4.00	Moderate High (MH)
4.01 hingga 5.00	High (H)

The findings show that the leadership support for research activities among administrators and teachers in the Belaga district is at a Moderate-High level overall (M = 3.369, SD = 1.144). School leadership support in Belaga reflects ongoing efforts to encourage a research culture. The highest level of support is seen in leaders allowing administrators and teachers involved in research to participate in or present their studies at external seminars or colloquiums (M = 1.899, SD = 3.661), while the lowest is in providing facilities for conducting research (M = 0.989, SD = 3.227).

Although the effort to allow teachers to attend external seminars or colloquiums has the highest support score (M = 1.899, SD = 3.661), the lack of facilities to conduct research remains a significant challenge, with the lowest score (M = 0.989, SD = 3.227). This finding highlights the need to improve physical and technical support for research activities. Although the support level is Moderate-High (ST), there is still room for improvement, particularly in providing facilities and appointing mentors. The positive relationship between leadership support and research success has been supported by numerous past studies (Fullan, 2001; Zeichner, 2003).

To further enhance effectiveness, leaders need to:
1. Provide consistent material and moral support.
2. Expand professional development opportunities through seminars and workshops.
3. Institutionalize recognition to enhance motivation and acknowledgment.

The permission to attend external seminars or colloquiums by school leaders reflects the understanding of the importance of collaboration and external learning opportunities in empowering teachers in research. According to Hairon and Tan (2017), teacher involvement in professional learning communities helps them gain exposure to new methods and improves the effectiveness of their pedagogical practices. However, the lack of research facilities reflects the infrastructure challenges commonly found in rural areas like Belaga, including limited technological resources and access to information (Aziz *et al.*, 2020).

This challenge needs to be addressed through greater investment in providing basic research facilities, such as stable internet access and supporting equipment. For instance, a study by Abas et al. (2018) in Sarawak found that logistical and infrastructural support played a crucial role in the success of action research implementation. Additionally, leadership initiatives to provide technical guidance and financial support can enhance teachers' ability to carry out research effectively.

Challenges Faced by Respondents in Conducting Research
To understand the challenges respondents face in conducting action research in schools, we observe their reactions to concerns about conducting action research, as shown in the following Table 4. There is a sense of worry among administrators and teachers when tasked with conducting action research, which often leads to delays and the inability to carry out research activities.

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Table 4: Concerns About Action Research Activities

No.	Item	SP	MIN	Findings
1.	Lack of skills to conduct action research	0.864	3.864	MH
2.	Skills in analyzing statistical data	0.877	3.938	MH
3.	Not achieving the desired quality	0.951	3.653	MH
4.	Adhering to research report specifications	0.854	3.851	MH
5.	Ability to synthesize research data	1.021	3.339	MH
6.	Producing high-quality action research	0.910	3.372	MH
7.	Concern about using inaccurate data	0.892	3.500	MH
8.	Lack of confidence in discussing research methodology	0.951	3,248	MH
9.	Whether the methods used are correct	0.834	3.682	MH
10.	Writing convincing conclusions and discussions	0.835	3.740	MH
Overall Score		0.899	3.619	MH

1. **Technical and Statistical Skills**

The findings show that teachers are concerned about their technical skills, such as analyzing statistical data (M = 3.938) and improving skills in conducting action research (M = 3.864). This lack of expertise is a significant challenge in producing quality research, as noted by Hairon and Tan (2017), where teachers often feel uncertain about their abilities in statistics and methodology. This issue not only causes delays in research but also reduces teachers' motivation to actively engage in a research culture.

2. **Concerns About Data Quality and Accuracy**

Concerns about the quality of research produced (M = 3.653) and data accuracy (M = 3.500) reflect teachers' uncertainty in producing acceptable reports for publication. Aziz et al. (2020) note that teachers in rural areas often face technical constraints and lack relevant references, making them less confident in ensuring their research results meet academic standards. This issue is a major challenge in ensuring the effectiveness of action research as a tool to improve pedagogical practices.

3. **Confidence in Data Synthesis and Report Writing**

The inability to synthesize data (M = 3.339) and difficulty in writing convincing conclusions (M = 3.740) are among the significant constraints. According to a study by Abas et al. (2018), these weaknesses typically arise from a lack of training and technical guidance, especially in rural schools like those in Sarawak. Without adequate guidance, teachers often find it challenging to translate their research findings into structured, high-quality reports.

4. **Anxiety About Research Publication**

The findings also highlight concerns related to publication specifications (M = 3.851) and the likelihood of research being published (M = 3.682). This issue aligns with Hairon and Tan (2017), who emphasize that publication is a critical stage in the research cycle but often acts as a barrier due to its complex process, requiring continuous support from school leaders.

5. **Leadership Support and Time Management**

This challenge is compounded by time constraints and the lack of systematic support. Research by Rohana et al. (2022) found that school leaders who are proactive in providing platforms and guidance for research can help reduce teachers' concerns. However, the absence of such support often leads to delays or failure to complete research, especially in rural schools facing various limitations, such as internet access and infrastructure.

Thematic Analysis of Challenges Faced by Respondents in Conducting Action Research
Among Administrators and Teachers in Schools in Belaga District, Sarawak:
1. **Time Constraints and Teacher Workload**

Interview findings indicate that time constraints and workload are the primary challenges in implementing action research (AR). Teachers struggle to balance their time between teaching duties, management tasks, and the school's intensive programs. A study by Nooraini and Ramli (2019) confirms that time constraints are among the main reasons for the ineffectiveness of AR implementation, especially in rural schools. The heavy workload causes teachers to feel less motivated to engage in additional activities like AR, even though they are crucial for their professional development.

2. **Lack of Infrastructure and Resources**

Issues such as weak internet access, power shortages, and inadequate financial allocation have been significant barriers. Respondents stated that the infrastructure in schools like SK Abun Matu is insufficient to support AR implementation. Rohana et al. (2022) highlight that weak infrastructure in rural areas can hinder teachers' efforts to access research resources or analyze data, thus delaying the research documentation process.

3. **Limited Exposure and Technical Guidance**

Teachers reported insufficient exposure and comprehensive training to conduct AR. Without adequate technical guidance, teachers face challenges in understanding the AR cycle and documenting their reports in the required format. Hairon and Tan (2017) found that teachers who lack knowledge about the research process need intensive support from school leaders and external experts to improve their capabilities.

4. **Motivational Challenges and Variations in Teacher Involvement**

Motivation to conduct AR appeared higher among younger teachers, particularly when encouraged by school leaders. Senior teachers, on the other hand, were reported to be less involved. This finding aligns with research by Aziz et al. (2020), which found that leader support in the form of recognition and appreciation could enhance teacher involvement in AR. However, the lack of a consistent reward system means that only a few teachers are actively implementing AR.

OVERALL CONCLUSION

This study reveals that the main challenges in implementing AR in schools in Belaga District are closely related to time constraints, lack of infrastructure support, limited exposure, and insufficient motivation among teachers. Although school leaders have made efforts to promote AR through organizing colloquiums and collaborating with the District Education Office (PPD), these challenges still need to be addressed to ensure AR becomes part of the school culture. The findings underscore the need for developing a more robust research ecosystem, including continuous professional training, infrastructure improvements, and providing recognition for teachers actively involved in research. It is recommended that a collaborative approach between schools, PPD, and higher education institutions be strengthened to expand AR implementation in rural areas.

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