International Journal of Multicultural and Multireligious Understanding

http://ijmmu.com
editor@ijmmu.com
ISSN 2364-5369
Volume 12, Issue 5
April, 2025
Pages: 130-144

Teachers' Perceptions of the Implementation of the Blue Ocean Strategy at LKP Matematika Indonesia Wonogiri in Developing Numeracy Competence in Mathematics: A Case Study in Boyolali

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http://dx.doi.org/10.18415/ijmmu.v12i5.6708

Abstract

This study is motivated by the importance of strengthening numeracy skills among teachers as a fundamental competency in supporting the success of the learning process, particularly in addressing the increasingly complex challenges of numeracy literacy. Teachers are expected not only to understand numeracy concepts theoretically but also to integrate numeracy skills into daily learning in a contextual and meaningful manner for students. To support this need, LKP Matematika Indonesia organizes a training program designed to enhance teachers' numeracy understanding and skills through an applied and problem-solving-based approach. This study aims to describe teachers' perceptions of the implementation of the Blue Ocean Strategy by LKP Matematika Indonesia Wonogiri in developing numeracy competencies. The research employs a descriptive qualitative method. Data sources consist of primary and secondary data. Primary data were collected through in-depth interviews with informants who met the criteria, namely elementary school teachers in Boyolali Regency who participated in the LKP Matematika Indonesia seminar. Secondary data were obtained from various sources, such as books, journal articles, and other relevant references that support this study. The data analysis in this research follows the interactive model of Miles, Huberman, & Saldana, which includes data collection, data condensation, data presentation, and conclusion drawing. The findings indicate that the implementation of the Blue Ocean Strategy by LKP Matematika Indonesia Wonogiri in numeracy training for elementary school teachers in Boyolali has generated positive perceptions. Overall, the application of the Blue Ocean Strategy in numeracy training by LKP Matematika Indonesia Wonogiri is considered an innovation with significant potential to improve elementary school teachers' numeracy competencies in Boyolali. However, to ensure the effective implementation of this strategy, a more inclusive approach, continuous training, and adequate resource support for teachers are required.

Keywords: *Blue Ocean Strategy; Implementation; Perception; LKP Matematika*

Introduction

Indonesian education still requires significant reinforcement in numeracy skills. This necessity is based on various survey findings from both national and international institutions, which consistently indicate a lack of improvement in students' numeracy competencies. Furthermore, Indonesia has consistently ranked low in international assessments of mathematical skills, such as the Programme for

International Student Assessment (PISA) (Muniri et al., 2023; Benu et al., 2024; Setiawan et al., 2024; Khoerunnisa et al., 2024). The results of Indonesia's student numeracy proficiency survey, facilitated by the Organization for Economic Co-operation and Development (OECD) through PISA, reveal that approximately 71% of Indonesian students fail to meet the minimum competency level. This finding highlights that Indonesian students continue to struggle with problem-solving tasks that require mathematical reasoning.

Several factors contribute to the low numeracy proficiency of Indonesian students. First, the teaching methods implemented are not contextualized. Mathematics instruction tends to emphasize rote memorization of formulas and problem-solving without deep understanding or practical applications (Hazimah & Sutisna, 2023; Mangkuwibawa et al., 2024). Second, there is a lack of teacher training. Many teachers are unfamiliar with literacy-based mathematical problems, which hinders students' ability to tackle complex problem-solving tasks (Rohmah et al., 2022). Third, weak learning culture also plays a role. Socio-cultural aspects that prioritize exam scores over skill development further contribute to students' poor numeracy performance.

Given these challenges, improvements are necessary to enhance students' numeracy skills. One of the key efforts is improving teachers' numeracy competencies. Teachers must receive training in effective and efficient teaching methodologies that encourage logical and critical thinking, particularly in numeracy-based learning. This is crucial because teachers act as the driving force in education. They must develop their competencies holistically, encompassing knowledge, skills, ethical behavior, motivation, and self-reflection on personal values to foster effective learning (Rerngrit et al., 2015; Leila & Maryam, 2018; Nguyen, 2023). The advancement of education requires teachers to possess pedagogical, personal, social, and professional competencies. A key aspect of professional competency development is the ability to understand curricula and implement them effectively.

One institution contributing to the enhancement of Indonesian teachers' numeracy competencies is the Indonesian Mathematics Course and Training Institute (Lembaga Kursus dan Pelatihan – LKP) in Wonogiri. Established in 2012, this institution aims to introduce innovative solutions to address challenges in mathematics education and change the stigma that mathematics is a difficult and intimidating subject. Instead, LKP Mathematics Indonesia strives to foster the perception that mathematics is an easy, engaging, and enjoyable subject.

The mathematics tutoring industry in Indonesia is currently experiencing increasingly complex and competitive dynamics. This phenomenon is also observed in other countries, such as Africa and Ghana, where tutoring institutions face new challenges (Joubert & Snyman, 2018; Aboagye, 2020; Okoro et al., 2021). In Indonesia, the growing number of mathematics tutoring centers reflects the increasing demand for supplementary mathematics education. Competition is no longer limited to pricing but also includes instructional quality, teaching methods, technological support, and personalized student services.

The proliferation of educational institutions in Wonogiri, such as LKP Ganesha Wonogiri, Ganesha Operation, Kumon, Primagama Wonogiri Pemuda, LKP Neutron, Bimbingan Belajar Pelita Harapan, Bimbingan Belajar Prestasi, Bimbingan Belajar dan Privat Phytagoras, Bimbingan Belajar Nuris, Galileo Bimbingan Belajar, and Bimbingan Belajar STAN SS Science Society Wonogiri, has saturated the market. This intense competition raises the question of how mathematics tutoring institutions can innovate to meet the increasingly diverse learning needs of students amid high competitive pressures. Many tutoring institutions in Indonesia have adopted innovations such as digital platforms and interactive technologies. However, the effectiveness of these innovations remains debatable, as not all of them successfully address students' core issues, such as math anxiety (Tymms & Peters, 2020).

The fierce competition in this industry underscores the importance of innovation in meeting students' diverse learning needs amid market pressures. Many tutoring institutions in Indonesia have

adopted digital platforms and interactive technology. However, the effectiveness of these innovations remains a topic of debate, as not all address the core issue of students' anxiety toward mathematics (Tymms & Peters, 2020).

The Blue Ocean Strategy, introduced by Kim & Mauborgne Renee, (2016), offers an innovative solution by focusing on creating new value through market boundary reconstruction and unique educational offerings. This strategy encourages tutoring institutions to move beyond intense competition (Red Ocean) and shift toward innovation that meets students' actual needs—sometimes even before they recognize those needs (Kim, 2005; Cziesielski et al., 2021; Hamra & Gassabi, 2021). However, implementing the Blue Ocean Strategy in mathematics tutoring institutions is not without challenges, including shifting mindsets, initial investment in innovation, and difficulties in predicting market responses (Kim & Mauborgne, 2016). Therefore, a critical review of this strategy's implementation is highly relevant to identifying solutions that enable tutoring institutions to sustain and expand their impact.

Recognizing these challenges, LKP Matematika Indonesia has acknowledged the limitations of short-term impacts from tutoring services solely focused on improving individual student performance. Consequently, the institution has begun shifting its service orientation from enhancing student achievements to strengthening the professional capacity of mathematics teachers. This transition aligns with the principles of the Blue Ocean Strategy, which emphasizes creating new value by targeting underserved segments—in this case, educators. By making teachers the primary focus, LKP Matematika Indonesia is not only reshaping the numeracy education landscape but also establishing a new, low-competition market.

In 2013, the management of LKP Matematika Indonesia officially redefined its target market from students to teachers and educators. This strategic shift aimed to avoid market competition and create an untapped space that other institutions had not previously considered, as most organizations traditionally focused on students rather than teachers. Moreover, this change was driven by research findings indicating that low numeracy literacy levels stem from teachers' limited ability to design numeracy-based classrooms due to the absence of relevant training programs (Ekowati et al, 2019, Salvia, Sabrina, & Maula, 2022,Siregar, 2022). The lack of numeracy literacy training and awareness programs has ultimately affected teachers' capacity to implement numeracy-based learning strategies (Perdana & Suswandari, 2021). Additionally, various professional development programs provided by the government have not effectively addressed the issue of low numeracy literacy, as reflected in the National Assessment and PISA results (Imron, Pramono, Suwito Eko, Rusilowati, Ani, 2022). This highlights that numeracy literacy has not yet become an ingrained aspect of Indonesia's education system.

Boyolali is one of the regencies in Central Java that urgently requires numeracy training. According to data from the Central Java Provincial Center for Educational Quality Assurance (BBPMP), students' numeracy proficiency in Boyolali falls below the minimum competency level. At the elementary level, the numeracy proficiency index is 1.62 (on a scale of 1–3), with 2% of students categorized as proficient, 31.83% as competent, 51.82% as basic, and 14.35% requiring special intervention. At the junior high school level, the index score is 1.75, with 6.08% of students classified as proficient, 37.42% as competent, 50.94% as basic, and 5.55% requiring special intervention (BBMP, 2023). Research further confirms that low numeracy literacy levels in Boyolali's elementary schools are attributed to several factors: teachers predominantly focus on factual knowledge and memorization, neglecting process and contextual aspects; they fail to consider students' prior knowledge; mathematics teaching models lack diversity; and overall student learning outcomes do not meet expectations (Novitasari, Sutama, Narimo, & Sabar, 2023; Aziz, M. Ridwan & Safitri, 2023).

To address these issues, the Boyolali District Education Office has introduced a policy to conduct periodic training sessions involving external training institutions (Saidi, A., & Habibi, 2022), including LKP Matematika Indonesia. This strategy aims to enhance teachers' pedagogical, personal, social, and

professional competencies. The training programs, both introductory and advanced, are designed to introduce teachers to new technologies that can be adapted for learning purposes (Çalışkan, G., & İzmirli, 2020).. Teachers must develop the necessary skills to harness innovation, modify teaching strategies, and create new learning experiences to improve education quality (Saleh, Muhidin, Zakiah, Yuliati, Erihadiana & Suhartini, 2021). However, many teacher development programs have historically been implemented based on qualitative and speculative analyses by decision-makers, often lacking precise data (Sumaryanta, Mardapi, D., Sugiman, & Herawan, 2018). Given the research evidence and BBPMP data highlighting low student numeracy proficiency, teacher training has become a key element in sustainable development efforts, particularly in addressing Boyolali's numeracy challenges.

The success of the Blue Ocean Strategy implementation largely depends on user response, particularly from teachers participating in LKP Matematika Indonesia's training programs. Initial exploratory studies reveal diverse teacher perceptions of numeracy training. Some teachers hold positive attitudes, believing that numeracy training significantly enhances their understanding of its importance in daily life and teaching (Poewanto *et al.,* 2024). Well-designed training programs can foster positive attitudes toward numeracy and help teachers integrate numeracy skills across various subjects (Goos *et al*., 2014; Connolly *et al*., 2023). However, some teachers—particularly in post-compulsory education—express negative attitudes, often due to past negative experiences or a lack of understanding regarding the distinction between numeracy and mathematics (Kay, 2016). Therefore, more intensive and innovative training approaches, incorporating game-based learning and technology, are recommended to enhance teachers' and students' numeracy skills (Silitonga, 2023).

Within the Blue Ocean Strategy framework, these challenges present opportunities for training institutions to develop novel approaches that differ from conventional models. By offering more intensive, innovative, and adaptive training—such as the integration of gamification, technology, and interactive teaching methods—training providers can introduce new value propositions previously unavailable in the market. Consequently, the effectiveness of numeracy training is not solely dependent on content but also on how programs are designed to reach and reshape teachers' perspectives on numeracy instruction in a broader and more sustainable manner.

Based on these considerations, this study aims to explore teachers' perceptions of the Blue Ocean Strategy in numeracy development at LKP Matematika Indonesia. This research is crucial in obtaining an objective understanding of teachers' views on the Blue Ocean Strategy through the training provided by LKP Matematika Indonesia. The study focuses on perceptions regarding service innovation, program benefits, training relevance to the curriculum, and overall service satisfaction. The novelty of this research lies in its approach, which extends beyond student academic outcomes to emphasize pedagogical transformation, positioning teachers as primary agents of change. The findings are expected to serve as a foundation for designing more innovative and impactful training policies to enhance numeracy education in Indonesia.

Methods

The research approach used in this study is descriptive qualitative. Qualitative research is generally descriptive (Kim, & Bradway, 2017), aiming to gain insights into the construction of reality, which can then be interpreted according to theoretical concepts and empirical categories (Cropley, 2019; Have, 2004). The selection of a descriptive approach is intended to explore teachers' perceptions regarding the implementation of the Blue Ocean Strategy at LKP Matematika Indonesia Wonogiri in developing numeracy competence in mathematics subjects.

The research data were obtained from both primary and secondary sources. Primary data refers to data collected directly from informants to address specific research problems or questions (Cooper, D. R & Schindler, 2014).. Data collection was conducted through interviews with informants who met the

research criteria. Meanwhile, secondary data served as a complement to the primary data in this study. The secondary data were gathered from various sources, including books, journal articles, and other relevant references.

Data collection in this study was carried out through semi-structured interviews. Researchers could conduct face-to-face interviews with informants, conduct phone interviews, or engage in specific groups (Creswell, 2014). In this study, interviews were conducted directly with informants. The informants included elementary school teachers in Boyolali Regency who participated in seminars or training sessions organized by LKP Matematika Indonesia. In addition to interviews, the researcher also conducted observations to examine participants' responses during the training sessions.

One of the most critical elements in qualitative research is data analysis (Leech & Onwuegbuzie, 2007: 557). Data analysis is a systematic process of processing data from various collection techniques by organizing, categorizing, synthesizing, and identifying patterns to derive meaningful conclusions (Sugiyono, 2018). Qualitative data analysis requires researchers to simultaneously engage in data collection, data interpretation, and report writing (Creswell, 2014). This study employs the interactive model of Miles, Huberman, & Saldana (2014), which consists of data collection, data condensation, data display, and conclusion drawing.

The collected interview data were then processed. Before processing, data tabulation, coding, and screening were conducted. The initial step in data preparation was tabulation, where informants' responses were grouped into columns based on question items. Tabulation was performed by assigning data codes. The coding method involved assessing multiple responses from informants, allowing categorization into a structured database. Data examination focused on detecting and correcting illogical, inconsistent, or confusing data (Sekaran, U., & Bougie, 2016).

Results and Discussion

This study focuses on teachers' perceptions of the implementation of the Blue Ocean Strategy at LKP Matematika Indonesia Wonogiri in developing numeracy competencies in mathematics. The perceptions are centered on four key aspects: service innovation, benefits, relevance and needs, and perceptions of the provided services. These components align with the conceptual framework proposed by Kim & Mauborgne (2016). A detailed presentation of teachers' perceptions is provided below.

Perceptions of Service Innovation

Teachers perceive the numeracy training based on the Blue Ocean Strategy as a groundbreaking initiative that introduces a unique approach not yet available in other institutions. Innovation serves as a mechanism for resilience within the Blue Ocean Strategy framework (Mirghaderi *et al*., 2023). While numeracy training is typically student-focused, LKP Matematika Indonesia has chosen to focus on teachers. This decision is reflected in the following statement:

> *"I am very satisfied with the seminar. It has helped teachers feel motivated and inspired to innovate for further progress."* (NS/17/1/2025)

> *Sangat puas dengan pelaksanaan seminar dapat membantu guru untuk bersemangat dan berinovasi untuk lebih maju (NS/17/1/2025)*

Interview findings indicate that participants experienced significant positive impacts from the seminar on their professional motivation and creativity. This statement underscores the seminar's success not only in content delivery but also in fostering teachers' enthusiasm for change and self-development—

key indicators of educational quality improvement. Such innovation is a strategic move to mitigate existing weaknesses (Nikabadi & Zamani, 2016). However, it is crucial to assess the extent to which this enthusiasm translates into real practice in schools, as post-seminar euphoria often diminishes without follow-up or sustained mentoring.

Innovative educational services are a crucial strategy for LKP Matematika Indonesia to strengthen its competitive edge. As stated by Kompella (2024), service innovation with an appropriate business model can enhance understanding of educational transformation, improve marketing strategies, and achieve productivity, efficiency, and sustainability. One of LKP Matematika Indonesia's key innovations is shifting the training focus from students to teachers, effectively responding to teachers' needs while setting new trends (Helmer *et al*., 2022).

Teachers who participated in the numeracy training based on the Blue Ocean Strategy viewed this approach as a breakthrough in mathematics education. The training not only reinforced numeracy content but also enhanced teachers' professional capacity, particularly in addressing 21st-century educational demands emphasizing problem-solving, creativity, and critical thinking. This indicates that the innovation has the potential to expand the market (D. Bourletidis, 2014).. As highlighted by Kim & Mauborgne Renee (2016), the Blue Ocean Strategy eliminates elements that are no longer relevant in competition while creating new value for users. In this context, the numeracy training based on the Blue Ocean Strategy functions as an innovation that establishes a more effective and engaging learning environment, distinct from conventional training models.

Interview results further reveal that teachers were highly satisfied with the seminar, as it provided motivation and encouragement to innovate. However, maintaining this innovation's advantages requires ongoing follow-up efforts and long-term mentoring. As emphasized by Sunusi et al (2024),, a systematic and sustainable mentoring process significantly assists teachers in designing and implementing educational innovations in schools. Additionally, research by Prasetiyo et al., (2022) suggests that a combination of workshops and mentoring can enhance teachers' competencies in technology-integrated learning. Moreover, Ambarwati et al., (2023) found that mentoring in e-learning integration improves teachers' digital competencies and their readiness to implement innovative teaching practices.

Perception of Program Benefits

The perception of the benefits of the LKP Mathematics Indonesia Wonogiri program aims to assess the advantages that teachers gain from participating. Additionally, the program's effectiveness also depends on how easily users can access and utilize it. In the framework of the Blue Ocean Strategy, the usefulness of a program is largely determined by value innovation, ease of access, competitive pricing, and its ability to create new market spaces. This aligns with the following interview findings.

"Most fast calculation tricks can be utilized for mathematics learning in the classroom" (M/17/1/2025).

Sebagian besar trik perhitungan cepat dapat dimanfaatkan untuk pembelajaran matematika di kelas (M/17/1/2025)

Fast calculation tricks have significant potential in enhancing the effectiveness of mathematics instruction, particularly in accelerating students' comprehension of concepts and improving their arithmetic skills. This finding aligns with research indicating that quick calculation methods can enhance students' learning outcomes (Tuan *et al*., 2019). Additionally, these rapid methods are highly effective as they save time (You *et al*., 2024). The fast calculation techniques provided by LKP Mathematics Indonesia Wonogiri include songs, games, ice-breaking activities, humor, and other engaging strategies. This approach is supported by research from Tezer & Kivanc (2012), which found that teachers generally hold positive attitudes toward incorporating music into mathematics instruction. In practice, most LKP

programs primarily leverage quick tricks for numerical skills, as reflected in the following interview statement.

> "It enhances children's understanding in solving word problems, making mathematics more enjoyable for students" (NS/17/1/2025).

> *Meningkatkan pemahaman anak dalam pemecahan masalah soal cerita. Sehingga MTK bisa dianggap asik oleh peserta didik (NS/17/1/2025)*

This data highlights the necessity of improving students' comprehension in solving mathematical word problems, which often pose a significant challenge. This aligns with research by Walkington *et al*. (2019), which suggests that non-mathematical language comprehension plays a crucial role in problem-solving. Furthermore, Setiyawati *et al*. (2022) found that 81% of students struggle with understanding mathematical word problems. This difficulty arises because word problems require both mathematical and linguistic skills simultaneously (Di Lonardo Burr *et al*., 2021). One approach to addressing this challenge is integrating technology, as LKP Mathematics Indonesia has implemented by incorporating storytelling techniques in teacher training programs.

The effectiveness of using technology in addressing mathematical word problems has been well-documented (Gunbas, 2015). Additionally, intelligent tutoring programs have been shown to enhance students' problem-solving abilities in mathematics (Khodeir *et al*., 2018). More specifically, solving mathematical word problems requires a multifaceted approach that addresses linguistic comprehension, cognitive and non-cognitive constraints, and effective instructional methods. Consequently, LKP Mathematics Indonesia has positioned itself as a key player in providing teacher training aimed at enhancing students' numeracy skills.

The training sessions conducted by LKP Mathematics Indonesia introduce engaging and fast calculation techniques by integrating songs, games, ice-breaking activities, humor, and word problems as a strategy to overcome learning difficulties. This approach aligns with the findings of Zhou & Lian (2024) and Wang *et al*. (2024), who reported that integrating music into mathematics instruction significantly enhances student comprehension. However, Zhou & Lian (2024) also emphasized that music alone does not independently impact mathematics learning but must be supported by other factors, such as educational background.

The rapid problem-solving techniques developed by LKP Mathematics Indonesia are part of the Blue Ocean Strategy, which emphasizes maximizing benefits without increasing unnecessary complexity or costs (Linda Kusnita, 2019). This program addresses gaps in early childhood mathematics education by offering more interactive, engaging, and problem-solving-based methods, making mathematics more appealing to students who previously found it difficult. According to Clements & Sarama (2021), game-based and interactive approaches in early childhood mathematics instruction can significantly enhance both motivation and conceptual understanding. Additionally, this program benefits students across different educational levels by emphasizing problem-solving approaches that make mathematics more engaging. Fyfe et al., (2022) argue that problem-based learning helps students develop critical thinking and analytical skills more effectively than conventional methods. If this program continues to evolve with new innovations, it has the potential to create a new market space in mathematics education, differentiating itself from conventional tutoring programs that primarily focus on rote memorization and repetitive exercises. As noted by Kevlin (2023), innovations in mathematics education that emphasize student engagement and real-world applications can open new opportunities in education systems and foster a more adaptive learning ecosystem.

Perception of Curriculum Relevance

Teachers' perceptions of curriculum relevance play a crucial role in creating a competitive advantage by offering innovative and high-value educational approaches. The *Blue Ocean Strategy* focuses on developing new methods by emphasizing value innovation rather than merely competing in existing markets. Therefore, a curriculum designed under this strategy must be distinctive, engaging, and more beneficial compared to traditional systems. The *Blue Ocean Strategy* in the curriculum context highlights educational innovation by creating a more relevant, high-value learning system that does not merely follow the traditional competition stream.

The perceptions of elementary school teachers in Boyolali indicate that the training provided by *LKP Matematika Indonesia* is highly relevant to the curriculum. This is reflected in the following interview excerpts:

"The material presented is relevant to the curriculum." (BA/17/1/2025)
"Everything aligns with the curriculum." (AI/17/1/2025)

"Materi yang disampaikan relevan dengan kurikulum", (BA/17/1/2025)

"Semua sesuai dengan kurikulum". (AI/17/1/2025)

Based on these statements, it can be concluded that the numeracy training organized by *LKP Matematika Indonesia* has received positive responses regarding the alignment of its content with the needs of formal education. This finding aligns with the studies of Dole & Geiger (2020); Connolly *et al*. (2023), which emphasize that numeracy skills should be integrated into the curriculum or other subjects. In the Indonesian context, the *Merdeka Curriculum* integrates literacy and numeracy skills (Yusnanto *et al*., 2024) Therefore, teachers require continuous training to understand the differences between numeracy and mathematics and to develop effective teaching strategies that incorporate numeracy across the curriculum (Coffey & Sharpe, 2023).

Curriculum innovation serves as a key factor in creating sustainable differentiation. As stated by Alim & Aryani (2024), developing an innovative curriculum is one of the primary strategies for improving the quality of education in the digital era. This approach does not merely focus on competition but also introduces new, more valuable methods for users. According to Chandrasoma & Chu (2016), curriculum innovation strategies involve various methods and efforts, including facilitative, educational, persuasive, and coercive approaches, to achieve the desired educational goals. In the education context, an innovative curriculum must offer improvements and greater relevance compared to traditional systems.

Thus, the innovation introduced should not merely represent a difference in methods but also provide concrete solutions for understanding and solving mathematical problems more effectively. As Lase, (2021), highlights, the development of contextual learning approaches can help students connect instructional materials with real-life situations, thereby enhancing their comprehension and skills. The implemented curriculum should be more flexible, engaging, and high-value, without being constrained by intense competition with traditional learning models, thereby creating a new educational space beyond the existing competition. In this regard, the seminar by *LKP Matematika Indonesia* has successfully identified new opportunities in mathematics instruction.

Perception of Service Satisfaction

The perception of service satisfaction at LKP Matematika Indonesia aims to provide a comprehensive understanding of the quality of services delivered. Service satisfaction perception is not only about providing good service but also about creating a truly novel and high-value experience for customers. The quality of education and training services serves as one of the key indicators of teachers'

satisfaction in enhancing the quality of learning (Jiménez-Bucarey *et al*., 2021). Overall, participants' responses indicate that the LKP Matematika Indonesia seminar has successfully provided significant benefits. This serves as an indication that similar programs can continue to be developed and expanded to have a broader impact on students and educators. The following interview results provide supporting evidence:

"Satisfied with the responsiveness of the team and the materials presented" (NS/17/1/2025).

Puas dengan kesigapan tim dan materi yang disampaikan (NS/17/1/2025)

The interview findings reveal that the aspects of service quality and material substance play a crucial role in shaping positive perceptions. Satisfaction with the team's responsiveness reflects their efficiency, professionalism, and strong coordination in executing the event, all of which contribute to the overall participant experience. Meanwhile, appreciation for the presented materials suggests that the content is considered relevant, well-structured, and beneficial in meeting participants' needs. This indicates that the combination of organizer competence and content quality significantly impacts the success of a program or event. Furthermore, this satisfaction serves as an indicator of the effectiveness of the delivery method and the facilitators' preparedness in providing an optimal learning experience. Research suggests that high-quality service enhances participant satisfaction in training or seminar activities (K. Bourletidis, 2013). Additionally, participants valued the quality of the seminar content, noting that its clear presentation and appropriate methods facilitated a deeper understanding. The quality of materials and the competence of presenters play a significant role in increasing participant satisfaction in training programs (Alimuddin & Yuzrizal, 2020).

Overall, the positive responses from participants indicate that the LKP Matematika Indonesia seminar has met expectations in terms of organization and content quality. Participants' satisfaction with the seminar signifies that the program successfully contributes to improving mathematical understanding in a more effective and engaging manner. Evaluating the quality of seminar activities can provide recommendations for enhancing preparation and execution in the future. In line with Kuswara (2024) research, service satisfaction is not merely about meeting participants' expectations but also about creating new and more valuable experiences. This strategy emphasizes eliminating irrelevant barriers, enhancing essential aspects, and introducing unique innovations that differentiate the program from its competitors. Factors such as facilities, instructors, and service quality significantly influence participants' satisfaction in training programs.

The interview results confirm that seminar participants were satisfied with both the responsiveness of the organizing team and the quality of the materials presented. This satisfaction is primarily reflected in two key aspects: team responsiveness and material quality. Participants perceived the seminar organizers as responsive, professional, and efficient in addressing various needs throughout the event. The materials provided were considered valuable, relevant, and engagingly delivered, effectively enhancing participants' understanding of mathematics. In the context of the **Blue Ocean Strategy,** creating an exceptional service experience aligns with the **Eliminate-Reduce-Raise-Create Grid** framework (Kim & Mauborgne Renee, 2016). The seminar successfully reduced barriers to understanding mathematics, increased participant engagement, and fostered a more interactive and enjoyable learning environment.

The implementation of the **Blue Ocean Strategy** in numeracy development at Matematika Indonesia received positive feedback from teachers. By adopting the principles of value innovation, curriculum reconstruction, and service enhancement, this program has successfully created a new educational market space in mathematics without directly competing with conventional tutoring institutions. However, as emphasized by Kim & Mauborgne (2016), the biggest challenge in the **Blue Ocean Strategy** lies in ensuring the sustainability of innovation so that it does not become a short-lived trend. Therefore, long-term mentoring, continuous material development, and technological adaptation in

learning are necessary. With the right strategy, the **Blue Ocean Strategy** in mathematics education in Indonesia can continue to evolve and generate long-term impacts on teachers and students.

Conclusion

The implementation of the Blue Ocean Strategy by LKP Matematika Indonesia Wonogiri in numeracy training for elementary school teachers in Boyolali has generated diverse perceptions. In general, this strategy aims to create a new market space in numeracy competency development by offering more innovative learning methods, distinct from the conventional approaches commonly used.

One of the key positive aspects highlighted by teachers is the creative approach to numeracy learning introduced by LKP Matematika Indonesia Wonogiri. By emphasizing problem-based learning and the use of interactive teaching aids, this strategy is perceived to enhance a deeper understanding of mathematical concepts. Teachers who participated in the training appreciated the method as it provided an engaging alternative for teaching mathematics to their students.

However, several challenges emerged in the implementation of this strategy. One of the primary concerns is the readiness of teachers to adopt the new methods. Not all teachers have the same level of preparedness in applying this innovative approach in their classrooms. Some educators found the techniques introduced to be quite complex, requiring time for effective adaptation into their school curriculum. Additionally, limitations in resources, such as teaching aids and supporting facilities in schools, have also posed challenges in optimizing the implementation of this strategy.

From a sustainability perspective, many teachers expressed the need for follow-up mentoring after the training to ensure the effective application of the new methods. Moreover, the integration of this approach with the existing national curriculum remains a crucial concern for educators.

Overall, the application of the Blue Ocean Strategy in numeracy training by LKP Matematika Indonesia Wonogiri is recognized as an innovative initiative with significant potential to enhance the numeracy competencies of elementary school teachers in Boyolali. However, for its implementation to be truly effective, a more inclusive approach, continuous training, and adequate resource support for teachers are necessary.

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