

## INVESTIGATING ENGLISH TEACHERS STRATEGIES IN IMPLEMENTING INQUIRY-BASED LEARNING METHODS UNDER THE INTERNATIONAL BACCALAUREATE (IB) CURRICULUM

By

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**Abstract:** This study aims to analyze the implementation of Inquiry-Based Learning (IBL) strategies in elementary English classes within the context of the International Baccalaureate (IB) curriculum at Yogyakarta Independent School (YIS). The research highlights the urgency of transitioning from traditional teacher-centered approaches to student-centered learning models. Through a qualitative approach, this study identifies various challenges and opportunities faced by teachers in implementing IBL, as well as evaluates the effectiveness of this method in creating a more dynamic and participatory learning environment. The findings provide strategic insights for enhancing teacher readiness and developing strategies that schools can adopt to optimize the implementation of IBL, with the ultimate goal of fostering a more transformative and meaningful educational experience for students.

## INTRODUCTION

The landscape of education is constantly evolving in response to societal changes, including economic, technological, and cultural shifts (Sancho, 2005). The significant impact of Information and Communication Technologies (ICT) on teaching and learning processes. However, the true challenge in modern education extends beyond technological integration. To prepare students for the future, particularly within the context of Society 5.0—an era characterized by advanced technology and social innovation—we must emphasize the development of 21st-century skills. These skills include critical thinking, communication, creativity, and collaboration, which are essential for navigating complex global challenges (Jayadi et al., 2023; Sumiyatun & Setiawati, 2023). Additionally, English proficiency is vital for competing in the global job market, as it enables students to communicate and connect across international boundaries (Hasan et al., 2022).

Teachers are central to this transformation and require continuous professional development to keep pace with technological and cultural changes, ensuring they can provide the best guidance and support to their students (Sumiyatun & Setiawati, 2023). The COVID-19 pandemic has accelerated the integration of technology in education, highlighting the importance of skills like critical thinking and collaboration more than ever (Rochmat et al.,

2023). The shift to online and hybrid learning environments has underscored the necessity of these skills, as students and teachers alike have had to adapt to new methods of learning and interaction. In response, the Indonesian government launched the Merdeka Belajar curriculum to enhance individual initiative and global competitiveness, aiming to create a more flexible and adaptive education system capable of meeting the demands of a rapidly changing world (Rochmat et al., 2023). A significant component of this initiative is the Merdeka Belajar Kampus Merdeka (MBKM) program, which seeks to prepare students for globalization by emphasizing practical experience and real-world skills (Sidhi, 2022).

One innovative teaching method gaining traction is Inquiry-Based Learning (IBL). This student-centered approach encourages learners to explore and ask questions, leading to deeper understanding and engagement. Within the Merdeka Belajar curriculum, IBL has been shown to improve learning outcomes, particularly in social studies, by promoting active learning and critical thinking (Septianoko & Muhsinatun Siasah, 2019). IBL shifts the focus from traditional rote memorization to a more dynamic and participatory form of learning, where students take charge of their education and become active participants in the learning process. Research in Yogyakarta demonstrates that IBL helps foster a well-rounded education, equipping students with the skills needed to succeed in a complex and interconnected world (Widyastuti, 2023). For example, Yogyakarta Independent School (YIS) utilizes the International Baccalaureate (IB) curriculum, which emphasizes holistic development and prepares students to be global citizens (Setyawan, 2017). This approach not only enhances academic achievement but also promotes intercultural understanding and empathy, crucial in today's diverse and globalized society.

However, implementing IBL comes with challenges, such as time constraints and task complexity, requiring careful planning and support from educators and institutions (Roslan et al., 2023). Since its emergence in the 1960s, IBL has transformed education, moving away from memorization to a more engaging form of learning that focuses on developing critical thinking skills (Barron & Darling-Hammond, 2010; Lower-Hoppe et al., 2021). Teachers play a vital role by guiding students through inquiry and creating activities that encourage exploration, fostering a learning environment where curiosity and creativity can thrive (Lower-Hoppe et al., 2021). The International Baccalaureate (IB) program, founded in 1968, embodies these principles, offering tracks like the Primary Years Programme (PYP) and Diploma Programme (DP) to address diverse educational needs and prepare students for the complexities of the modern world (Peterson, 2003; Maryono et al., 2022).

Studies have shown that IBL can significantly enhance learning outcomes across various subjects. For instance, research by Maknun and Haryanti (2022) found that IBL effectively teaches Indonesian language skills, while Ermawati et al. (2017) demonstrated improvements in reading comprehension among EFL students. These findings highlight IBL's potential to enhance educational experiences and equip students with the skills they need to succeed in a rapidly changing world. Addressing challenges such as time constraints and ensuring adequate resources and support are available is essential for successful IBL implementation, ensuring that all students can benefit from this innovative approach to learning. This article explores how IBL is reshaping modern education, focusing on its integration within the International Baccalaureate program and its role in preparing students for the demands of Society 5.0. By examining IBL's challenges and benefits, this study

provides insights into enhancing educational practices and teacher readiness in a dynamic world. Understanding these dynamics is crucial for educators, policymakers, and stakeholders who aim to create learning environments that empower students to thrive in the 21st century. As we look to the future, fostering an education system that is flexible, inclusive, and adaptive will be critical in preparing the next generation for the challenges and opportunities ahead.

## METHOD

This study employs a case study as a qualitative research method to explore the effectiveness of the Inquiry-Based Learning (IBL) method in the classroom. A case study is a research method that deeply examines one or a few real-life situations within specific time and place constraints, making it highly dependent on the context (Karlsson, 2016). This method offers flexibility to researchers in various aspects, such as the size and duration of the cases, the number of cases studied, the methods of data collection, and the process of theory development. Creswell (2014) states that the qualitative method is a special tradition in social science that focuses on exploring the meanings of groups or individuals. This case study was conducted at Yogyakarta Independent School (YIS), focusing on the elementary level (grades 5-6), where teachers often face the challenge of accommodating all students' ideas. The IBL method allows each student to develop their own ideas, with common questions such as "what," "how," "where," and solutions frequently arising in the learning process. Data was collected through qualitative interviews, observations, and case studies, with the primary focus on understanding student engagement and creativity levels in classes using the IBL method, as well as identifying factors that support or hinder its implementation. The interview data will be analyzed using thematic analysis to identify key patterns and themes related to factors influencing the effectiveness of the IBL method and reasons for student engagement or disengagement. This analysis will provide deeper insights into the factors affecting student activity and creativity in the classroom.

## FINDING AND DISCUSSION

This section aims to presents the data and discuss the findings from the interviews and observations conducted at Yogyakarta Independent School (YIS) for effectively implementing IBL as well as the mechanisms in place to support teacher readiness. The integration of Inquiry-Based Learning (IBL) within the International Baccalaureate (IB) Primary Years Programme (PYP) represents a transformative approach to education that emphasizes student ownership of learning. For the sake of clarity, these are organized for each teacher in two sub-sections as follows: How is IBL carried out in English classes of primary school under the IB curriculum? And What strategies to schools implement to enhance teachers' readiness for teaching using IBL?

### **IBL carried out in English Classes of primary school under IB curriculum**

There are several support systems and programs carried out by YIS to support teachers in applying this IBL method. As the author has attached above, YIS uses the IB curriculum with PYP where teachers must process many ideas from each student, therefore the teacher provides answers regarding the support needed for this teaching method.

*"every week each teacher holds a meeting for each student's development and exchanges ideas. with a seven-week program guide that helps them apply IBL in class such as an overview of unit 6 in grades 3-4 in English class, students are given the topic of Persuasive techniques and produce some persuasive texts and in 5 weeks students are given time to process the topic to be presented in week 7 "*

This guide helps in planning and structuring lessons, ensuring a cohesive teaching approach. So that the learning time for each meeting is flexible because the teacher is only a student facilitator to support their imagination. Weekly evaluations allow teachers to assess student activities and share experiences with colleagues. This practice fosters a collaborative environment where teachers learn from each other. Teachers at YIS are informed of expectations and meet regularly to improve teaching practices.

*"Because we don't have specialized training on this method, we often use the Toddle Portal app, which is a valuable resource that supports teachers with IBL curriculum and lesson ideas. The program helps build confidence and readiness in teaching with IBL, and encourages creative and critical thinking. with the time teachers have flexibility of seven weeks to complete a unit of study this application is very helpful at each meeting to accommodate student ideas. besides that parents play an important role in the development of children, and visits to various places are one of the attractions for children to think more critically."*

#### **Strategies to schools implement to enhance teachers' readiness for teaching using IBL**

From the results of this interview, the data concludes that the Toddle Portal is an important tool for teachers in developing the IBL method. Involving parents and other professionals, such as doctors and firefighters, also enhances the learning experience. YIS can further support by providing an overview of the learning unit and organizing outdoor workshops to develop creative ideas. in addition to school strategies teachers also need to be supported to meet the needs of students, to applying the Inquiry-Based Learning (IBL) method, teachers face various challenges. At YIS, a school with diverse students from different countries, teachers need a deep understanding of their students' cultures, mindsets, and ways of speaking.

*"One common challenge is managing a class of 20-25 students, each with unique family backgrounds. When teachers introduce a topic, students come up with numerous ideas for processing it, but teachers can't address all of them. Therefore, parents or guardians of the students play a vital role in this learning process. For instance, if the topic is about business, student guardians provide real-life examples of how businesses operate and insights from professionals".*

The main challenges in IBL include meeting the individual needs of students, involving parents in the learning process, and the limited capacity of teachers to implement every student's idea. Teachers must find ways to accommodate diverse ideas and facilitate each student's learning journey. YIS offers a variety of professional development opportunities, including training sessions, simulations, and field trips, to prepare teachers to implement Inquiry-Based Learning (IBL). In an interview with a teacher taken in April 2024, she said

*"The IBL learning method has been carried out since i worked at YIS, so with this, I am quite trained in this method, but with the development of AI technology, we teachers must improve in providing ideas and input. Therefore, on several occasions, grade 3-4 students*



*have conducted workshops to include visits to the Sanata Dharma University butterfly park, which provides a hands-on learning experience, so that students can analyze how butterflies reproduce, eat, and the types of butterflies"*

The teachers' role is to monitor while students are learning and get them to reflect on what they are doing and why. This means not giving students the answers but instead supporting them in developing competencies that will enable them to find the answers themselves. This shows that teachers' takes on the role of a "facilitator". The effectiveness of training provided has proven to be very effective in improving teachers' readiness to implement IBL. For example, teachers' in grades 3-4 take students on an exploration of their surroundings, which sparks curiosity about insects.

## Discussion

IBL implementation at YIS focuses not only on knowledge acquisition, but also on developing students' critical thinking skills and creativity. Teachers stated that the purpose of IBL at PYP is to foster curiosity, cultivate a love for learning, and improve critical thinking and problem-solving skills. This method motivates students to actively engage in their learning process, encouraging independent thinking. The use of technology, such as the Toddle Portal, shows that technology can be a valuable tool in supporting teachers. Hattie (2009) emphasizes that technology used effectively can increase student engagement. YIS should continue to explore other applications and platforms that can assist teachers in lesson planning, classroom management, and providing timely feedback to students.

The weekly evaluation process conducted by teachers is crucial to improving the quality of education. Hattie and Timperley (2007) explain that appropriate and constructive feedback can promote growth for both teachers and students. YIS could consider implementing a more structured formal evaluation system where teachers can provide feedback not only to students but also to each other. However, the flexible time allocation to complete a seven-week unit of study also presents challenges in balancing depth of learning with meeting all curriculum standards. Therefore, YIS needs to develop an effective scheduling strategy where teachers can identify and prioritize key topics that need to be taught. Group discussions among teachers can help formulate a more structured plan.

The insights gained from discussions with teachers at Yogyakarta Independent School (YIS) provide a deep understanding of how Inquiry Based Learning (IBL) is implemented in the Primary Years Program (PYP) curriculum. Teachers emphasized the importance of professional development in preparing educators to integrate IBL. They mentioned that YIS provides various training opportunities, including simulations, workshops and field trips. For example, a workshop for grades 5 and 6 involved a visit to the butterfly garden at Sanata Dharma University, which allowed students to explore concepts first-hand. This practical learning approach is in line with Barron & Darling-Hammond's (2008) research, which highlights the role of professional development in improving teachers' capacity to implement inquiry-based methods.

Teacher training is an important foundation for the successful implementation of IBL. As pointed out by Darling-Hammond et al. (2017), effective training provides not only the theoretical knowledge but also the practical skills needed to manage inquiry-based learning. Therefore, YIS could expand its training program by inviting guest speakers from outside or

collaborating with other educational institutions to bring in new perspectives. Parental involvement is crucial in the educational process, especially in IBL, which emphasizes on students' needs and interests. Epstein (2011) asserts that strong school-family collaboration can improve student motivation and learning outcomes. YIS could organize workshops for parents to help them understand the concept of IBL and how they can contribute to supporting their children's learning at home.

The PYP curriculum at YIS is designed to encourage inquiry and facilitate learning through a structured and thematic approach. Teachers explained that the curriculum revolves around six themes, such as "How We Express Ourselves" and "Sharing the Planet". These themes integrate various subjects, encouraging an interconnected approach to education. This strategy is supported by Drake & Burns (2004), who advocate an integrated curriculum design to enhance student engagement and learning. By supporting a safe environment for teachers and students to experiment with learning and providing additional training for teachers on how to integrate activities that encourage critical thinking and creativity, YIS can continue to foster innovation in teaching. In doing so, YIS not only prepares students to become independent learners but also critical thinkers capable of facing future challenges.

## CONCLUSION

The investigation into strategies for implementing Inquiry-Based Learning at Yogyakarta Independent School reveals a commitment to fostering an environment conducive to inquiry-based education. Professional development, the structured PYP curriculum, and effective engagement strategies are fundamental to the successful implementation of IBL. However, challenges related to teacher readiness, resource availability, and student diversity remain. Recommendations for improving the implementation of IBL at YIS include enhanced training initiatives, resource allocation, and stronger collaboration with the community to enrich inquiry-based projects. By focusing on these areas, YIS can strengthen its commitment to developing independent learners equipped to thrive in a rapidly changing world while utilizing the IBL framework effectively. This holistic approach will ultimately lead to improved educational outcomes and a richer learning experience within the IB PYP.

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