

Innovative Approaches to Science and Social Studies-Centered Learning with a Focus on Student Wellbeing in Elementary Education

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Submitted: 2024-01-30 DOI: 10.23917/ppd.v11i1.6173

Revised: 2024-03-30 Accepted: 2024-04-30

Keywords:	Abstract
centered learning;	Science and Social Studies-centered learning in elementary schools has the potential
science and social	to significantly enhance student wellbeing by addressing their holistic learning needs. This study seeks to examine how student wellbeing is integrated into the Science and
studies education;	Social Studies (IPAS)-centered curriculum for elementary students. Employing a qualitative research design grounded in a phenomenological approach, the study
student wellbeing	explores the lived experiences of students, teachers, and the school principal at Diponegoro Elementary School during the IPAS learning process. Data for this research were gathered through in-depth interviews, observations, and document analysis, with participants including teachers, the school principal, and students. Triangulation techniques were utilized to ensure data validity. The data analysis was conducted following the Miles and Huberman model, which comprises data reduction, data display, and conclusion drawing. The findings indicate that IPAS-centered
	learning has effectively integrated science and social studies through project-based learning initiatives, which actively engage students in practical, real-world applications. As a result, students have become more active and participatory, benefiting from hands-on activities within a supportive and conducive learning environment. This approach not only enhances learning outcomes but also underscores the importance of student wellbeing by fostering an integrated, holistic
	educational experience.

INTRODUCTION

Background of the Study

The innovation in Science and Social Studies (IPAS)-centered learning places a significant emphasis on enhancing student wellbeing as a fundamental component of educational success.

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Research suggests that students who receive robust emotional and social support demonstrate higher levels of learning motivation. Furthermore, integrating wellbeing into the learning process can alleviate stress and improve students' concentration. Prado-Botana et al. (2023) argue that fulfilling basic psychological needs, such as competence, autonomy, and social connection, is essential for sustaining motivation. Supporting this, Rakhmalia (2021) found that students with greater wellbeing not only achieve higher academic results but also exhibit better attendance. Similarly, Supriyadi et al. (2022) highlight the strong relationship between student wellbeing and the quality of interactions with both teachers and peers—critical elements in IPAS-centered learning. By foregrounding student wellbeing, IPAS-centered innovations foster more effective learning environments that support students' academic and socio-emotional development.

Student wellbeing has emerged as a central concern in contemporary education, particularly in elementary settings, reflecting a growing recognition of the vital role that mental and emotional health play in academic achievement. This emphasis on holistic education is driven by the understanding that many students lack meaningful learning experiences that translate into everyday life and future success. According to UNICEF (2019), student wellbeing has a direct impact on academic performance, with survey data indicating that students with higher levels of wellbeing are more motivated to learn. Research by Anderson et al. (2021) further suggests that learning environments supportive of wellbeing can mitigate stress and anxiety among students. Consequently, the integration of wellbeing into elementary school pedagogy is increasingly recognized as a critical factor in fostering effective learning. A comprehensive understanding of the role of student wellbeing in IPAS-centered learning can yield valuable insights into the development of more impactful educational practices. Rahardjo et al. (2023) propose that wellbeing-centered approaches enhance both academic outcomes and student engagement. In parallel, Testa (2023) asserts that integrating wellbeing into the curriculum positively influences learning motivation. Similarly, Lindsay et al. (2023) demonstrate that learning environments that prioritize wellbeing contribute to higher student motivation and achievement. This research aims to investigate the operational dynamics of IPAS-centered learning models that incorporate student wellbeing in elementary schools, offering insights into their educational impact.

The implementation of Science and Social Studies (IPAS)-centered learning, grounded in student wellbeing, effectively integrates both natural and social sciences through project-based learning, yielding significant benefits for students. This pedagogical approach consistently engages students in hands-on activities rooted in real-world experiences, all within a comfortable and conducive learning environment. By holistically combining academic content with a focus on student wellbeing, this model fosters a more supportive and enriching educational experience. A study by Hossain et al. (2023) demonstrated a positive correlation between student wellbeing and academic achievement, while research by lanah et al. (2021) revealed that learning models prioritizing wellbeing can enhance student engagement and motivation. Similarly, a report from The World Bank (2020) highlighted that education centered on student wellbeing creates a more inclusive and effective learning environment. The application of IPAS-centered learning, with a focus on student wellbeing, is therefore predicted to have a profound positive impact on elementary school students.

Problem of The Study

The central issue addressed by this research is the integration of student wellbeing into IPAS-centered learning for elementary school students. Traditional educational methods frequently overlook the emotional and social dimensions of student wellbeing, which can adversely affect student engagement and learning outcomes. There is a pressing need to adopt a more holistic learning approach that combines both academic content and wellbeing. Previous studies, such as Hidayati et

al. (2022), have shown that educational approaches that fail to prioritize student wellbeing often result in decreased motivation and participation. Similarly, research by Handono et al. (2023) underscores the potential for increased student engagement through more interactive and relevant pedagogical methods in elementary education. Literature on student wellbeing suggests that adequate emotional and social support significantly enhances both student satisfaction and academic performance (Nisar et al., 2024).

Despite efforts to integrate academic content and student wellbeing in IPAS-centered learning at Diponegoro Elementary School, challenges remain. Observations indicate that not all students are fully engaged in the learning activities, with some receiving insufficient attention to their wellbeing needs. Teacher interviews revealed that, while they acknowledge the importance of student wellbeing, they often face constraints in terms of time and resources to effectively implement strategies that address this area. Teachers also reported difficulties in balancing academic instruction with wellbeing considerations, as well as in identifying and responding to individual students' emotional needs. According to the school principal, while policies supporting student wellbeing are in place, practical implementation continues to face numerous obstacles. The principal also noted that teacher training on integrating student wellbeing into the IPAS-centered learning model is still inadequate. Thus, this research aims to explore and describe the practical integration of student wellbeing in IPAS-centered learning for elementary school students. By examining the challenges and opportunities associated with this approach, the study seeks to provide valuable insights into improving the effectiveness of wellbeing-centered education.

Research's State of the Art

The Integrated Science and Social Studies (IPAS) learning center has proven highly effective in enhancing students' comprehension of scientific concepts. This pedagogical approach facilitates the integration of natural and social sciences, offering a more contextualized and meaningful learning experience. By engaging multiple disciplines and promoting deeper learning, students are encouraged to actively explore and participate in hands-on practices. Dewi and Reza (2020) revealed that students involved in the IPAS learning center exhibited significantly greater improvements in their understanding of scientific concepts compared to those taught through traditional methods. Furthermore, Handono et al. (2023) found that the integration of natural and social sciences within a singular learning center enabled students to better connect theoretical knowledge with real-world applications, thereby enhancing knowledge retention. Similarly, Marudut et al. (2020) demonstrated that the IPAS learning center fosters the development of critical thinking skills. Collectively, these findings underscore the IPAS center's capacity to serve as a robust framework for the more effective mastery of scientific concepts.

Student wellbeing-centered learning approaches also exert a positive influence on both academic performance and emotional well-being. When student wellbeing is prioritized, a supportive and conducive learning environment is fostered, which enhances classroom dynamics. A strong sense of wellbeing is closely linked to increased student motivation and engagement in the learning process. Research by Nisar et al. (2024) indicates that programs specifically designed to improve student wellbeing correlate positively with higher academic achievement. In a related study, Korpershoek et al. (2020) found that students who perceive themselves as socially and emotionally supported tend to experience lower anxiety and demonstrate higher levels of motivation. Similarly, Anderson et al. (2021) revealed that student wellbeing significantly contributes to heightened active participation in class. Therefore, wellbeing-centered learning can produce beneficial effects across both academic and emotional dimensions.

The integration of the IPAS learning center with a student wellbeing-focused approach fosters a holistic and inclusive educational environment. This method not only emphasizes academic proficiency but also prioritizes the development of students' emotional and social wellbeing—an essential

component for long-term success. By fostering a range of competencies, this approach ensures that all students can engage effectively in the learning process. Ianah et al. (2021) found that learning strategies that combine student wellbeing with academic content substantially increase overall student engagement and motivation. Carla et al. (2024) similarly noted that students participating in programs integrating wellbeing tend to demonstrate better academic outcomes and exhibit stronger motivation. Moreover, a report by The World Bank (2020) confirms that inclusive and holistic educational practices, which incorporate student wellbeing, contribute to a more effective and sustainable learning environment. As Kjærgaard et al. (2024) pointed out, much of the existing literature has treated academic learning and student wellbeing as distinct domains, with limited attention given to their integration. This study thus provides a novel perspective on merging academic learning with student wellbeing, offering valuable insights for developing more holistic and impactful teaching methodologies at the primary school level.

Gap Study & Objective

Previous research has inadequately addressed the influence of Integrated Social and Natural Sciences (IPAS) learning centers on student wellbeing at the elementary school level. Most studies tend to focus exclusively on either student wellbeing or the integration of scientific and social studies, rarely considering the simultaneous application of both within the framework of center-based learning. For instance, Efendi et al. (2013)concentrated on the integration of science and social studies but did not engage with the dimension of student wellbeing. Similarly, Gregory et al. (2021) examined student wellbeing in broader educational contexts without analyzing specific pedagogical methods. Li et al. (2019) explored STEM education but failed to link it to student wellbeing. This study seeks to fill that gap by investigating the potential for IPAS learning centers to enhance student wellbeing in elementary education.

The primary objective of this research is to evaluate the manifestation of student wellbeing within IPAS center-based learning for elementary school students. It is essential to assess how effectively this pedagogical approach can be implemented and to understand the processes and impacts related to student wellbeing in IPAS center-based education. Yeh and Barrington (2023) demonstrated that well-structured educational programs can significantly improve students' psychological wellbeing, while Lera et al. (2023) found that wellbeing-centered educational approaches can enhance both learning outcomes and student satisfaction. By examining these dynamics, this study aims to offer valuable insights into the implementation and outcomes of IPAS center-based learning grounded in student wellbeing.

METHOD

Type and Design

This study investigates the realization of student wellbeing in IPAS center-based learning for upper elementary students at Diponegoro Islamic Elementary School, specifically targeting grades IV and V. A phenomenological design is employed to explore the experiences of students, teachers, and school leadership within the context of IPAS center-based education. Diponegoro Elementary School was selected due to its established use of center-based learning, facilitated by classrooms specifically designed for different learning centers, such as those dedicated to religion, science, social studies, literacy, arts, and technology. Given its focus on subjective experiences, a phenomenological design is well-suited for uncovering the nuanced perceptions of individuals involved in this learning process.

Neubauer et al. (2019)posited that phenomenology enables researchers to delve deeply into the meanings individuals ascribe to their lived experiences, while Rijal (2021) emphasized the qualitative approach's capacity to capture subtle dynamics often overlooked by quantitative methodologies. Creswell (2019) further supported the use of qualitative research for exploring the

meanings individuals or groups assign to social phenomena. Consequently, a phenomenological design provides a comprehensive and holistic lens through which to explore the embodiment of student wellbeing within IPAS center-based learning.

Data and Data Sources

The data utilized in this research encompass various forms of information related to the IPAS learning process. This includes interviews with two classroom teachers, NA and DE, the principal of Diponegoro Elementary School, as well as students from fourth and fifth grade. Direct observations were also conducted within the science and social studies centers, with a focus on the interactions between students and teachers, student engagement, and the overall classroom environment. Furthermore, supporting documentation was gathered to supplement the primary data. The use of diverse data sources was designed to ensure a comprehensive and multifaceted perspective, strengthening the triangulation of data from various origins. Yin (2018) asserts that triangulation through multiple data sources significantly enhances the validity and reliability of research findings by offering a deeper insight into the phenomenon under investigation. Consequently, the rich and varied data collected in this study allow for a nuanced understanding of the complex learning processes associated with the implementation of student wellbeing in IPAS center-based learning.

Data collection technique

This research employed a combination of data collection techniques, including in-depth interviews, direct observations, and documentation analysis. These methods were selected to provide rich, detailed data and a contextualized understanding of the educational practices being examined. The use of multiple data collection techniques ensures that the study captures a holistic and in-depth representation of the manifestation of student wellbeing in IPAS center-based learning. Interviews were conducted with the principal, classroom teachers, and students to gain insights into both the implementation of IPAS centers and the perceptions surrounding student wellbeing. Simultaneously, direct observations were made during the learning processes within the science and social studies centers, with particular attention given to student-teacher interactions, student participation, and the atmosphere within the classroom. Additionally, supporting documentation was collected to further enrich the data. This triangulated approach to data collection guarantees a robust and comprehensive depiction of student wellbeing as realized within IPAS-centered learning.

Data analysis

The data analysis for this research was conducted using the interactive analysis technique developed by Miles and Huberman. This method was chosen for its capacity to systematically manage and deeply engage with the complexities of qualitative data, while also offering the flexibility necessary to accommodate the evolving nature of data throughout the research process. The analysis proceeded through several key stages, including data collection, data reduction, data display, conclusion drawing, and verification. Miles and Huberman's interactive approach facilitates a thorough and dynamic analysis, establishing a solid foundation for exploring the realization of student wellbeing in IPAS center-based learning at the elementary school level.

RESULTS

IPAS-centered Learning Process

The integration of student wellbeing into IPAS-centered learning for elementary school students was examined through interviews with three primary informant groups: the principal, classroom teachers, and students. These informants provided valuable insights into the implementation of the center-based learning methodology and its subsequent impact on student wellbeing.

Table 1. Results of Interviews on the IPAS-centered Learning Process

Informant	Aspect	Description of Interview Results
Principal	IPAS-centered Learning	At Diponegoro Islamic Elementary School, center-based learning is implemented within the science and social studies centers. Each center is fully equipped with relevant tools and materials to facilitate learning activities, with a focus on thematic learning that connects classroom material to real-life situations.
Class Teacher	IPAS-centered Learning	The IPAS-centered learning process at our school employs project and experiment-based methods, actively engaging students in hands-on research activities. These methods are developed according to teaching modules we design in-house, allowing for tailored learning experiences.
Student	IPAS Center-Based Learning	

Table 1 presents findings from interviews conducted at Diponegoro Islamic Elementary School regarding the implementation of IPAS center-based learning. The school integrates two distinct learning centers—science and social studies—each equipped with specialized tools and materials that enhance the learning experience. Thematic learning forms the core of this approach, enabling students to relate academic content to their everyday lives. Teachers incorporate project-based and experimental methods, which are aligned with self-designed teaching modules, fostering active student engagement in the research process. According to the students, this approach is more stimulating than traditional teaching methods, as it deepens their engagement and enhances their understanding of the material. These findings suggest that the thematic, project-driven model of IPAS center-based learning significantly increases both student interest and comprehension.

Table 2. Results of Observations on the IPAS Center-Based Learning Process

Aspect Observed		Description of Observation Results		
IPAS-centered Learning	1.	Students demonstrated active participation in experimental and project-based activities.		
	2.	The science and social studies centers were equipped with appropriate tools and materials, effectively facilitating the integration of both subjects		
	3.	Each learning session successfully integrated scientific and social studies content.		

	 Teachers provided clear, structured instructions and foste collaborative learning among students. 	
Student Wellbeing	Students exhibited high levels of enthusiasm and motivation throughout the learning activities.	
	Positive, supportive interactions between students and teachers, as well as among peers, were prominently observed.	
	 No significant indicators of stress or discomfort were identified during the learning sessions. 	
	 Teachers consistently offered emotional support and constructive feedback, contributing to a nurturing and supportive educationa environment. 	

Table 2 illustrates that students are actively engaged in experimental and project-based activities within the IPAS center classroom. Their participation involves the utilization of appropriate tools and materials in both the science and social centers, facilitating a deeper, practical, and interactive understanding of the subject matter. The integration of natural sciences (IPA) and social sciences (IPS) is distinctly observable in each learning session, enriching the educational experience and enabling students to recognize the interconnections between these two disciplines. The role of teachers is pivotal; they provide clear guidance and foster collaboration among students, thereby creating an environment that is both conducive and interactive for learning.

From the perspective of student well-being, research findings indicate that students exhibit high levels of enthusiasm and motivation during educational activities. This engagement is further reinforced by positive interactions between students and teachers, as well as among peers. Notably, no significant indicators of stress or discomfort were observed during the learning process, suggesting that students feel secure and supported within their educational environment. Teachers consistently offer essential emotional support and constructive feedback, which collectively enhances the overall well-being of the students. This evidence underscores the effectiveness of the IPAS center learning approach in cultivating a nurturing atmosphere that supports both academic and emotional development.

Impact of IPAS-centered Learning

The implementation of student well-being integration in IPAS center learning for elementary school students is examined through the perspectives of three key informants: the principal, classroom teachers, and students. These informants provide insights into the impact of this pedagogical approach on student well-being.

Table 3. Results of research interviews on the impact of IPAS-centered learning

Informant	Aspect	Deskripsi Hasil Wawancara
Principal	IPAS-centered Learning	Centered learning is highly effective in enhancing
		student engagement and comprehension of

		material; however, it necessitates adjustments for optimal implementation.
	Student Wellbeing	The well-being of students is paramount, underscored by the existence of emotional and social support programs. I have served as principal for two terms and have observed an increase in student satisfaction with the learning environment.
Class Teachers	IPAS-centered Learning	This methodology enables students to engage in learning that is more contextual and relevant, thereby improving their motivation and educational outcomes. Centered learning is conducted in the centered classroom on Mondays and Tuesdays
	Student Wellbeing	One component of the student well-being program is counseling and social activities. I have observed a positive impact on student behavior and participation as a result of these programs
Student	IPAS-centered Learning	Through the centered learning experience, students perceive enhancements in both scientific and social disciplines, facilitated by enjoyable learning processes.
	Student Wellbeing	In my view, student well-being is realized when students receive emotional support through various activities. This support fosters a greater sense of comfort and motivation to learn

The data presented in Table 3 indicates that the student well-being program within the learning centers at Islamic Elementary School Diponegoro has a significant impact. The principal, WR, highlights the crucial role of emotional and social support programs for students, which have contributed to heightened student satisfaction with the learning environment. Throughout his two terms of leadership, WR has noted a consistent improvement in student well-being. Classroom teacher, TA, elaborates that the student well-being initiative encompasses counseling and a range of social activities. These programs have visibly enhanced student behavior and participation in educational activities. With the emotional and social support provided, students feel increasingly motivated and comfortable in their learning processes. Students themselves report experiencing direct benefits from the well-being programs, feeling emotionally supported through various activities designed to promote their welfare. Consequently, this support cultivates an environment where students feel more at ease and inspired to learn, ultimately leading to improved academic outcomes.

In conclusion, the student well-being program at Islamic Elementary School Diponegoro not only enhances students' comfort and motivation in the learning process but also significantly influences their behavior and participation within the center learning framework. The emotional and social support provided through this initiative has proven effective in enhancing both student well-being and academic outcomes.

Table 4. Research Observation Results on the Impact of IPAS-centered Learning

Observed Aspect	Description of Observation Results

IPAS-centered Learning	1.	Learning activities encompass group discussions, presentations, and demonstrations.
	2.	Students engage in active inquiry by asking questions.
	3.	Students exhibit increased communication and interactivity during lessons,
Student Wellbeing	1.	A safe and inclusive learning environment fosters a sense of value and support among students.
	2.	Students demonstrate greater openness and willingness to express their opinions.
	3.	Students perceive their learning environment as more comfortable and supportive.

Table 4 illustrates that IPAS center learning effectively integrates the disciplines of natural and social sciences within an interactive educational setting, simultaneously promoting students' emotional and social well-being. In this context, students actively participate in a diverse array of activities, including experiments, projects, group discussions, and presentations. The strategic use of appropriate tools and materials enhances practical and integrative learning experiences across IPA and IPS. Teachers deliver clear instructions and foster collaborative engagement among students, cultivating a dynamic and interactive learning atmosphere.

With respect to student well-being, students display high levels of enthusiasm and motivation throughout their learning activities. The positive interactions that occur both among students and between students and teachers contribute to a conducive learning environment. Teachers consistently provide essential emotional support and constructive feedback, ensuring that all students feel secure and comfortable. The inclusive and safe classroom environment empowers students to feel acknowledged and supported throughout their educational journey. Consequently, classroom observations indicate that IPAS center learning is not only effective in bolstering student engagement and comprehension of the subject matter but also in promoting their emotional and social well-being, thereby creating a holistic and supportive learning atmosphere. This assertion is further substantiated by the following documentation evidence:

Table 5. Research Documentation

Learning Activities in the Centered Classroom	Description
	The accompanying images depict students actively engaged in the IPAS center classroom, utilizing spaces, tools, and materials specifically designed to facilitate the learning of natural and social sciences. Notably, students are observing a video presentation on the solar system, which significantly enriches their learning experience.
	The image illustrate the collaborative interactions between teachers and students throughout the learning process. Teachers provide vital guidance that fosters student enthusiasm and motivation, while the classroom environment is meticulously designed to enhance student engagement.



Table 5 presents documentation that reinforces the researcher's findings on the implementation of student well-being-focused IPAS-centered learning for elementary school students. It is evident that the classroom space for center learning is thoughtfully designed in alignment with the pedagogical objectives of natural and social sciences and is equipped with the requisite tools and materials to support effective learning. The active involvement of teachers in guiding students plays a critical role in nurturing enthusiasm and motivation throughout the learning process.

DISCUSSIONS

This study aims to elucidate the realization of student well-being integration within the framework of IPAS-centered learning for elementary school students. Observational data indicate a robust integration of natural and social sciences within the center learning model. Comprehensive interviews conducted with the principal, teachers, and students provide nuanced insights into the efficacy of this pedagogical approach. Observations reveal that students actively participate in a variety of activities, including experiments and group discussions. The principal underscores the critical role of emotional and social support programs in fostering student well-being (Yuiin et al., 2024). Teachers report that the center learning method significantly enhances student engagement and motivation. The synthesis of observational data, interviews, and supporting documentation suggests that IPAS center learning is not only effective in augmenting material comprehension but also plays a vital role in promoting the emotional and social well-being of students (Zhou, 2023).

The IPAS-centered Learning Process

The implementation of IPAS center learning in elementary education prioritizes an integrative approach that amalgamates student well-being with interactive and practical learning experiences. This model employs tools and materials specifically tailored to meet the practical needs of the science and social centers, thereby enabling students to engage in activities that are both relevant and applicable. Teachers assume a pivotal role in facilitating the learning process by delivering clear and structured instructions (Konings et al., 2021). Such instructional strategies not only enhance students' comprehension of the subject matter but also promote collaboration among peers, which is essential for fostering a dynamic and inclusive classroom environment. Shavard (2023) asserts that social support from educators and peers is indispensable for student well-being.

Furthermore, the integration of multimedia learning resources, such as interactive videos, constitutes a crucial element in bolstering student engagement. These videos effectively capture students' attention while elucidating complex concepts that may be challenging to convey through verbal explanations alone. Additionally, teachers provide active guidance throughout the learning journey, ensuring that each student feels supported and valued. This support encompasses both constructive feedback and emotional encouragement, facilitating a comfortable and motivating learning atmosphere. Susanto (2022) highlights the significance of emotional support in educational contexts. Moreover, Hudig et al. (2021) and Woodcock et al. (2022) emphasize that an inclusive and

secure learning environment is fundamental to fostering student well-being, a condition that the IPAS center approach adeptly cultivates. The integration of student well-being into the IPAS center learning paradigm signifies a promising advancement in elementary education, with the potential to enhance both learning outcomes and overall student welfare (Bucker et al., 2018).

Impact of the IPAS-centered Learning Process

The implementation of IPAS-centered learning has yielded a profound impact on both student engagement and well-being, particularly when contrasted with traditional pedagogical methods. As articulated by Hanaysha et al. (2023), the contextualized and relevant nature of the center-based approach fosters a heightened level of student participation in hands-on activities, such as experiments and projects. This increased engagement not only deepens students' academic comprehension but also encourages greater involvement in classroom discourse, thereby cultivating a more dynamic and interactive educational environment.

Moreover, the integration of emotional and social support within the IPAS-centered learning framework has demonstrably contributed to enhanced student well-being (Keiler, 2018). Educators and school administrators alike have observed notable improvements in both student motivation and overall satisfaction with this innovative approach. For instance, Yuyun (2023) documented that students engaged in center-based learning exhibit significant gains in both academic involvement and emotional resilience (Zheng, 2022). By merging academic instruction with emotional support, this holistic model not only creates a nurturing learning environment but also elevates the quality of interaction between students and teachers, as well as peer-to-peer relations (Sayed Munna & Kalam, 2021). The integration of student well-being within academic learning is pivotal in fostering a balanced and comprehensive learning experience (Biggins & Holley, 2022). This assertion aligns with Minsih et al. (2023), who highlight the integrative implementation of the independent curriculum in driving schools, which emphasizes student skill development through the reinforcement of the Pancasila profile project.

The realization of IPAS-centered learning, underpinned by a focus on student well-being, significantly amplifies student engagement and bolsters emotional health. Muhibbin et al. (2023) observe that students in supportive learning environments display heightened levels of engagement and comfort, factors which positively influence their academic outcomes. In addition, school leadership has noted that this program not only enhances student participation but also fosters a more positive and conducive learning atmosphere throughout the school. Given its effectiveness across multiple dimensions of education, this student well-being-based IPAS-centered approach holds potential for broader adoption in other schools. As Suyuti et al. (2023) suggest, embracing this model can enable schools to achieve superior academic results while simultaneously nurturing overall student well-being. Thus, this holistic educational approach is not only pertinent to elementary school students but could also serve as a valuable framework for schools seeking to establish more effective and supportive learning environments.

CONCLUSION

The principal strength of this research resides in its holistic approach, which intricately integrates academic dimensions with the well-being of students. The IPAS-centered learning methodology offers a pertinent and interactive framework that significantly enhances students' learning experiences. The emotional and social support extended by both teachers and the educational institution plays a crucial role in bolstering the overall well-being of students. Furthermore, the application of appropriate tools and materials within the center learning context serves to elevate students' enthusiasm and comprehension. Educators have reported notable increases in student motivation and learning outcomes as a result of employing project-based and experimental methodologies. The principal has observed a marked improvement in student satisfaction stemming

from the supportive learning environment. Thus, the research's strength is anchored in its comprehensive strategy, which harmoniously blends academic learning with emotional and social support, thereby fostering an effective and holistic educational atmosphere. This study acknowledges several limitations, particularly the necessity for ongoing adaptations and the challenges encountered in the implementation of IPAS center learning. Successful execution of this educational approach requires careful modifications to ensure its efficacy. Continuous support is imperative to navigate the challenges that may arise during implementation. The principal has indicated a need for further adjustments in the operationalization of center learning, while teachers have identified difficulties in aligning student well-being initiatives with the academic curriculum. Although students demonstrate increased interest and engagement when adequately supported, they still require tailored adjustments in instructional methodologies. These limitations underscore that while IPAS center learning grounded in student well-being is effective, sustained adaptations and additional support are essential for optimizing outcomes. The findings of this study affirm that IPAS-centered learning, founded on principles of student well-being, is instrumental in enhancing both academic engagement and emotional well-being among elementary school students. The integration of natural sciences (IPA) and social sciences (IPS) through this method cultivates a relevant and stimulating learning environment. The emotional and social support programs embedded within the center learning framework yield positive effects on student well-being. Collectively, these findings suggest that the IPAS center learning model, oriented towards student well-being, effectively fosters a holistic educational environment that nurtures student engagement and overall well-being.

Acknowledgment

We extend our sincere gratitude to the Research and Innovation Institute (LRI) of Universitas Muhammadiyah Surakarta for generously funding this research, which has facilitated the publication of this article as a key output of the study. No: 302.65/A.3-III/LRI/VIII/2024 and Aug 26 2024.

REFERENCES

- Anderson, R. C., Bousselot, T., Katz-Buoincontro, J., & Todd, J. (2021a). Generating Buoyancy in a Sea of Uncertainty: Teachers Creativity and Well-Being During the COVID-19 Pandemic. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.614774
- Anderson, R. C., Bousselot, T., Katz-Buoincontro, J., & Todd, J. (2021b). Generating Buoyancy in a Sea of Uncertainty: Teachers Creativity and Well-Being During the COVID-19 Pandemic. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.614774
- Biggins, D., & Holley, D. (2022). Student wellbeing and technostress: critical learning design factors Presentation abstract. *Journal of Learning Development in Higher Education*, 1759–667. https://doi.org/10.47408/jldhe.vi25.985
- Bucker, S., Nuraydin, S., Simonsmeier, B. A., Schneider, M., & Luhmann, M. (2018). Subjective well-being and academic achievement: A meta-analysis. *Journal of Research in Personality*, 74, 83–94. https://doi.org/10.1016/J.JRP.2018.02.007
- Carla, I., Widiarsih, M., & Kuswandono, P. (2024). Motivational Pathways to Success in English Language Learning: Insights from Higher Education. *Jurnal Studi Guru Dan Pembelajaran*, 7(2), 804–815. https://doi.org/10.30605/jsgp.7.2.2024.4354
- Creswell, J. W. (2019). Research Design Pendekatan Metode Kualitatif, Kuantitatif dan Campuran. Yogyakarta: Pustaka Pelajar.

- Dewi, M. C., & Reza, M. (2020). Perbedaan Model Pembelajaran Sentra Dan Model Pembelajaran Kelompok Terhadap Kemampuan Problem Solving Pada Anak. Jurnal PAUD Teratai, 1(9). https://ejournal.unesa.ac.id/index.php/paudteratai/article/view/34711
- Efendi, A., Muhaimin, M., & Hamidaturrohmah. (2013). Efforts to Improve the Social Skills of Elementary School Students Through Modified Traditional Crank Games. *Jurnal Ilmu Keolahragaan*, 6(2), 708–715. https://doi.org/10.31851/hon.v6i2.12658
- Fadli Rijal, M. (2021). Memahami desain metode penelitian kualitatif. *Humanika, Kajian Ilmiah Mata Kuliah Umum*, 21(1), 33–54. https://doi.org/10.21831/hum.v21i1
- Gregory, T., Dal Grande, E., Brushe, M., Engelhardt, D., Luddy, S., Guhn, M., Gadermann, A., Schonert-Reichl, K. A., & Brinkman, S. (2021). Associations between School Readiness and Student Wellbeing: A Six-Year Follow Up Study. *Child Indicators Research*, *14*(1), 369–390. https://doi.org/10.1007/s12187-020-09760-6
- Hanaysha, J. R., Shriedeh, F. B., & In'airat, M. (2023). Impact of classroom environment, teacher competency, information and communication technology resources, and university facilities on student engagement and academic performance. *International Journal of Information Management Data Insights*, 3(2). https://doi.org/10.1016/j.jjimei.2023.100188
- Handono, D., Fitrotun Nisa, A., Prihatni, Y., & Negeri Jetak, S. (2023). Penerapan Metode Pembelajaran Berbasis Proyek Dalam Pembelajaran IPA Di Sekolah Dasar. *Jurnal Pendidikan & Artikel Pendidikan*, 15(2), 2579–4965. http://journal.ummgl.ac.id/nju/index.php/edukasi
- Hidayati, R., Triyanto, M., Sulastri, A., & Husni, M. (2022). Faktor Penyebab Menurunnya Motivasi Belajar Siswa Kelas IV SDN 1 Peresak. *Jurnal Educatio FKIP UNMA*, 8(3), 1153–1160. https://doi.org/10.31949/educatio.v8i3.3223
- Hossain, S., O'Neill, S., & Strnadová, I. (2023). What Constitutes Student Well-Being: A Scoping Review Of Students' Perspectives. In *Child Indicators Research* (Vol. 16, Issue 2, pp. 447–483). Springer Science and Business Media B.V. https://doi.org/10.1007/s12187-022-09990-w
- Hudig, J., Scheepers, A. W. A., Schippers, M. C., & Smeets, G. (2021). Motives for Studying and Student Wellbeing: Validation of the Motivational Mindset Model. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.753987
- lanah, A., Latifa, R., Kolopaking, R., & Suprayogi, M. N. (2021). Kesejahteraan Siswa: Faktor Pendukung dan Penghambatnya. *Business Economic, Communication, and Social Sciences (BECOSS) Journal*, 3(1), 43–49. https://doi.org/10.21512/becossjournal.v3i1.7028
- Keiler, L. S. (2018). Teachers' roles and identities in student-centered classrooms. *International Journal of STEM Education*, 5(1). https://doi.org/10.1186/s40594-018-0131-6
- Kjærgaard, A., Buhl-Wiggers, J., & Mikkelsen, E. N. (2024). Does gradeless learning affect students' academic performance? A study of effects over time. *Studies in Higher Education*, 49(2), 336–350. https://doi.org/10.1080/03075079.2023.2233007

- Konings, K. D., Mordang, S., Smeenk, F., Stassen, L., & Ramani, S. (2021). Learner involvement in the co-creation of teaching and learning: AMEE Guide No. 138. *Medical Teacher*, *43*(8), 924–936. https://doi.org/10.1080/0142159X.2020.1838464
- Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & de Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes in secondary education: a meta-analytic review. *Research Papers in Education*, 35(6), 641–680. https://doi.org/10.1080/02671522.2019.1615116
- Lera, M. J., Leon-Perez, J. M., & Ruiz-Zorrilla, P. (2023). Effective Educational Practices and Students' Well-being: The Mediating Role of Students' Self-efficacy. *Current Psychology*, 42(26), 22137–22147. https://doi.org/10.1007/s12144-022-03266-w
- Li, Y., Schoenfeld, A. H., diSessa, A. A., Graesser, A. C., Benson, L. C., English, L. D., & Duschl, R. A. (2019). Design and Design Thinking in STEM Education. In *Journal for STEM Education Research* (Vol. 2, Issue 2, pp. 93–104). Springer Nature. https://doi.org/10.1007/s41979-019-00020-z
- Lindsay, B. L., Bernier, E., Boman, J., & Boyce, M. A. (2023). Understanding the Connection Between Student Wellbeing and Teaching and Learning at a Canadian Research University: A Qualitative Student Perspective. *Pedagogy in Health Promotion*, *9*(1), 5–16. https://doi.org/10.1177/23733799221089578
- Marudut, M. R. H., Bachtiar, I. G., Kadir, K., & Iasha, V. (2020). Peningkatan Kemampuan Berpikir Kritis dalam Pembelajaran IPA melalui Pendekatan Keterampilan Proses. *Jurnal Basicedu*, *4*(3), 577–585. https://doi.org/10.31004/basicedu.v4i3.401
- Minsih, M., Fuadi, D., & Rohmah, N. D. (2023). Character Education Through an Independent Curriculum. *AL-ISHLAH: Jurnal Pendidikan*, 15(1), 597–602. https://doi.org/10.35445/alishlah.v15i1.2812
- Muhibbin, A., Patmisari, P., Naidu, N. B. M., Prasetiyo, W. H., & Hidayat, M. L. (2023). An analysis of factors affecting student wellbeing: Emotional intelligence, family and school environment. *International Journal of Evaluation and Research in Education*, 12(4), 1954–1963. https://doi.org/10.11591/ijere.v12i4.25670
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2), 90–97. https://doi.org/10.1007/s40037-019-0509-2
- Nisar, A., Hastings, R. P., Watkins, R. C., & Williams, S. (2024a). Mainstream and special schools' use of well-being programmes: A regional survey. *British Educational Research Journal*, *50*(1), 6–31. https://doi.org/10.1002/berj.3903
- Nisar, A., Hastings, R. P., Watkins, R. C., & Williams, S. (2024b). Mainstream and special schools' use of well-being programmes: A regional survey. *British Educational Research Journal*, *50*(1), 6–31. https://doi.org/10.1002/berj.3903
- Prado-Botana, M., Carretero-García, M., Varela-Garrote, L., & Fraguela-Vale, R. (2023). Satisfaction of Basic Psychological Needs as Predictors of Motivation towards Physical Education in Primary

- Education: Influence of Gender and Physical Self-Concept. *International Journal of Environmental Research and Public Health*, 20(24), 1–15. https://doi.org/10.3390/ijerph20247186
- Rahardjo, B., Jayanti, T. D., & Satriana, M. (2023). *Penerapan Pembelajaran Sentra Dalam Pengembangan Kecerdasan Logika Matematika Anak Usia Dini TK Islamic Center Samarinda*. Early Childhood Journal, 1 (1), 15 24. https://doi.org/10.30872/ecj.v1i1.208
- Rakhmalia, M. (n.d.). Penggunaan Model Pembelajaran Sentra Dan Lingkaran Dalam Meningkatkan Keterlibatan Siswa Di Pos Paud Terpadu. Jurnal Program Studi PGMI, 1 (1), 36-46. ttps://doi.org/10.69896/modeling.v1i1.33
- Sayed Munna, A., & Kalam, A. (2021). Teaching and learning process to enhance teaching effectiveness: a literature review. In *International Journal of Humanities and Innovation (IJHI)* (Vol. 4, Issue 1). https://doi.org/10.33750/ijhi.v4i1.102
- Shavard, G. (2023). Teachers' Collaborative Work at the Boundaries of Professional Responsibility for Student Wellbeing. *Scandinavian Journal of Educational Research*, *67*(5), 741–753. https://doi.org/10.1080/00313831.2022.2042851
- Supriyadi, E., Inayah, S., Dahlan, J. A., & Darhim, D. (2022). Bibliometric Review: Elementary and Mathematics Education from Indonesian Authors. *Profesi Pendidikan Dasar*, *9*(2), 176–190. https://doi.org/10.23917/ppd.v9i2.19481
- Susanto, R. (2022). Analisis dukungan emosional dan penerapan model kompetensi pedagogik terhadap keterampilan dasar mengajar. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 8(1), 26. https://doi.org/10.29210/1202221604
- Suyuti, S., Wahyuningrum, P. M., Jamil, M. A., & Nawawi, M. L. (2023). Analisis Efektivitas Penggunaan Teknologi dalam Pendidikan Terhadap Peningkatan Hasil Belajar. *Journal on Education*, *6*, 1–11. https://doi.org/10.31004/joe.v6i1.2908
- Testa, D. (2023). Interprofessional Collaboration: How Social Workers, Psychologists, and Teachers Collaborate to Address Student Wellbeing. *Australian Social Work*. https://doi.org/10.1080/0312407X.2023.2256703
- World Bank. (2020). The Promise of Education in Indonesia. https://www.worldbank.org/in/country/indonesia/publication/the-promise-of-education-in-indonesia
- Unicef. (2019). For every child, reimagine. www.unicef.org/publications.
- Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers' engagement with inclusive practices. *Teaching and Teacher Education*, 117. https://doi.org/10.1016/j.tate.2022.103802
- Yeh, C. S. H., & Barrington, R. (2023). Sustainable positive psychology interventions enhance primary teachers' wellbeing and beyond A qualitative case study in England. *Teaching and Teacher Education*, 125. https://doi.org/10.1016/j.tate.2023.104072
- Yin, Robert. K. (2018). Case Study Research and Applications Design and Methods (Sixth Editions). Singapore: SAGE Publications, Inc.

- Yuiin, K., Agung, A., Agung, G., & Dantes, K. R. (2024). Dampak Dukungan Sosial, Optimisme, Religius, dan Harga Diri Terhadap Kesejahteraan Subyektif Guru. *Jurnal Ilmiah Pendidikan Profesi Guru*, 7, 95–109. https://doi.org/10.23887/jippg.v7i1.73524
- Yuyun, I. (2023). Investigating university student engagement in online learning: A case study in EFL classroom. *Indonesian Journal of Applied Linguistics*, 12(3), 634–653. https://doi.org/10.17509/ijal.v12i3.46035
- Zheng, F. (2022). Fostering Students' Well-Being: The Mediating Role of Teacher Interpersonal Behavior and Student-Teacher Relationships. *Frontiers in Psychology*, 12. https://doi.org/10.3389/fpsyg.2021.796728
- Zhou, G. (2023). Testing a mediation model of teacher caring, grit, and student wellbeing in English as a foreign language students. *Frontiers in Psychology*, 14. https://doi.org/10.3389/fpsyg.2023.1260827