

Revitalizing Pancasila Values Through A Contextual Learning Model Based On Traditional Games At SMPN 41 Bandar Lampung

¹Fitriyani, ²Dedy Miswar, ³Apri Wahyudi, ⁴Yunisca Nuralisa

Department of Social Sciences Education
Faculty of Teacher Training and Education, University of Lampung (UNILA)
Bandar Lampung, Indonesia

Corresponding Author: Fitriyani, puanmatahari@gmail.com



Resume—The objective of this study is to develop an effective Contextual Teaching and Learning (CTL) model by integrating traditional games—Gobak Sodor and Terompah—into Pancasila Education at the junior high school level. This approach aims to enhance students' understanding and internalization of Pancasila values through active, enjoyable, and culturally relevant learning experiences. Using a qualitative descriptive case study design, data were collected through classroom observation, interviews, student reflections, and documentation across three learning sessions. Findings show that the CTL-based traditional game model fosters cooperative skills, discipline, responsibility, honesty, and multicultural awareness while significantly improving students' cognitive, affective, and social engagement. Despite challenges related to time allocation, facilities, and teacher readiness, the model proved to be pedagogically valuable and adaptable, offering a meaningful and transformative learning experience.

Keywords: Contextual Teaching and Learning, traditional games, Pancasila values, multicultural education, cooperative learning

Abstract—Pancasila Education (Civic Education in the Indonesian context) at the junior high school level is still dominated by conventional approaches that tend to be theoretical and less engaging for students. This has resulted in low student engagement and a superficial understanding of Pancasila values. This study aims to analyze the implementation of the Contextual Learning (CTL) model through traditional games, namely *Gobak Sodor* and *Terompah*, in improving understanding and learning outcomes in Pancasila Education at SMPN 41 Bandar Lampung. Using a descriptive qualitative approach, data were collected through observation, interviews, and documentation. The results indicate that the application of traditional games within the CTL framework successfully creates an active, collaborative, and contextual learning environment, encouraging students to understand and internalize Pancasila values in a more meaningful way. *Gobak Sodor* fosters values of cooperation and sportsmanship, while *Terompah* promotes discipline and responsibility. These findings suggest that integrating contextual approaches with local culture in learning holds significant potential for strengthening students' character education at school.

Keywords: Contextual Learning, Traditional Games, Pancasila Values, Interactive Learning, Junior High School.

I. INTRODUCTION

Pancasila Education (Civic Education in the Indonesian context) at the junior high school level is still predominantly delivered through lecture-based methods, which are theoretical in nature and provide minimal opportunities for students' active participation. This condition results in a low level of understanding and weak internalization of Pancasila values. Several studies have shown that the use of interactive and experiential learning models—such as the game “Context is Key”—strengthens knowledge through active engagement and contextual understanding (Ballon et al., 2004). With contextual adaptation, this approach can also be applied to

teaching Pancasila values. Furthermore, traditional games have been proven effective in enhancing cognitive processes and communication skills, as demonstrated in a study where students engaged in traditional game-based learning showed significant improvement in cognitive outcomes compared to those taught using conventional methods (Widiana et al., 2018).

To address this challenge, this study analyzes the implementation of the Contextual Learning (CTL) model through the traditional games Gobak Sodor and Terompah as an innovative approach to teaching Pancasila values in a contextual and enjoyable manner. The findings indicate that this approach can increase students' engagement in the learning process and foster a more meaningful understanding of cooperation, discipline, responsibility, and sportsmanship—values aligned with the essence of Pancasila as the foundation of national character building.

Contextual learning is essential because it connects the subject matter with students' real-life experiences, making learning not only theoretical but also relevant to their daily lives (Munir et al., 2020). In the context of Pancasila Education, this approach enables students to understand the nation's core values through activities closely related to their everyday experiences, such as traditional games (Permana et al., 2023). Through such activities, values such as mutual cooperation (gotong royong), discipline, responsibility, and honesty can be naturally internalized through direct experience rather than through rote memorization of concepts.

The Contextual Learning model implemented through traditional games is an effective approach to internalizing Pancasila values in an enjoyable and meaningful way (Widiana et al., 2018). By linking the learning material to students' real-life experiences, games such as Gobak Sodor and Terompah can cultivate cooperation, responsibility, discipline, and sportsmanship. This approach not only enhances student engagement but also strengthens their understanding of the essence of Pancasila as the foundation for character formation in daily life (Permana et al., 2023).

II. RESEARCH METHOD

This study employed a descriptive qualitative approach aimed at providing an in-depth description of the process and impact of implementing the Contextual Learning (CTL) model based on traditional games in *Pancasila Education (Civic Education in the Indonesian context)*. The research was conducted at SMPN 41 Bandar Lampung, with the primary subjects being Grade VIII students and the *Pancasila Education* teacher. Data collection techniques included direct observation of the learning process, in-depth interviews with teachers and students, and documentation of learning activities involving the games *Gobak Sodor* and *Terompah*.

The procedure began with lesson planning, followed by the implementation of game activities within the context of Pancasila values, and concluded with a reflection session involving the students. The data obtained were analyzed using the Miles and Huberman model, which includes data reduction, data display, and conclusion drawing. To ensure the validity of the findings, triangulation was applied in terms of both data sources and data collection methods.

III. RESULTS AND DISCUSSION

A. Implementation of CTL Learning through Gobak Sodor and Terompah Games

The application of the Contextual Learning (CTL) model in *Pancasila Education (Civic Education in the Indonesian context)* at SMPN 41 Bandar Lampung, integrating traditional games such as *Gobak Sodor* and *Terompah*, aligns with broader educational strategies that leverage traditional games to enhance learning outcomes and student engagement. Traditional games have been proven to significantly improve cognitive processes and student participation, as evidenced by research showing that students engaged in traditional game-based learning performed better cognitively compared to those in conventional settings (Widiana et al., 2018). This approach is not only effective for cognitive enhancement but also for instilling educational values, as traditional games inherently contain elements of cooperation, responsibility, and sportsmanship, which are essential in delivering Pancasila values (Munir et al., 2020).

Furthermore, integrating traditional games into educational settings has been associated with increased student motivation and improved learning outcomes, as these games provide collaborative and engaging environments that appeal to students' intrinsic and extrinsic motivational factors (Trajkovik et al., 2018). The contextual nature of such games also supports the development of higher-

order thinking skills and promotes interaction and collaboration among students—critical components of an effective learning environment (Yang et al., 2024). In addition, traditional games serve as a medium for teaching sustainability and fostering emotional well-being, which are vital for holistic education (Luchoro-Parrilla et al., 2024). Therefore, the use of traditional games in education not only addresses the issue of passive learning but also enriches the educational experience by making it more interactive and contextually relevant, thus aligning with the goals of *Pancasila Education* to develop well-rounded individuals (Almeida et al., 2015).

The stages of implementation began with careful planning by the teacher, which included designing a CTL-based lesson plan (*Rencana Pelaksanaan Pembelajaran*, RPP). At this stage, the teacher determined learning objectives that were not only cognitive but also affective and psychomotor in nature. Traditional games were incorporated into the core activities as a medium for active learning. The teacher also prepared learning scenarios that enabled students to directly engage in games representing national values, such as teamwork, responsibility for assigned roles, and honesty in following the game rules.

During the implementation phase, students were divided into small groups to participate in *Gobak Sodor* and *Terompah* games, which were modified to align with the learning objectives. The teacher provided instructions while also explaining the Pancasila values to be instilled through the activities (Ballon et al., 2004). In this process, students were actively and enthusiastically involved, demonstrating that real-life experiential approaches can more effectively capture their interest and participation compared to lecture-based methods (Widiana et al., 2018). According to Ballon and Silver, facilitators in the “Context is Key” game help learners synthesize knowledge and encourage group discussion—an important step in understanding complex topics such as diagnosing bipolar disorder in adolescents (Ballon et al., 2004). Similarly, in this context, the teacher acted as a facilitator, guiding discussion and reflection after the games were completed.

The dynamics of the learning process indicated significant changes in students’ interaction patterns. They became not only more physically active but also demonstrated a deeper understanding of the values gained from the gaming experience. This is in line with constructivist educational theory, which emphasizes the importance of social interaction and collaborative learning in physical education, allowing students to construct meaning through shared experiences and strategic cooperation (Barker et al., 2017). Furthermore, the social learning dynamics observed within the game communities highlighted the development of soft skills such as patience, coordination, and discipline—skills that are essential for fostering a spirit of solidarity and shared responsibility among students (Gandolfi, 2022).

For example, in *Gobak Sodor*, students learned the importance of collective strategy and accountability in maintaining their roles, while in *Terompah*, they developed patience, coordination, and discipline. These activities also built a strong sense of solidarity among students.

In educational settings, particularly within the Contextual Teaching and Learning (CTL) approach, the reflection stage serves as an essential component for connecting students’ learning experiences to real-life values, such as those embodied in Pancasila. This process is supported by various reflective practices and models discussed in the literature. For instance, the Play Curricular Activity Reflection Discussion (pCard) model demonstrates how structured reflection in game-based learning can enhance student motivation and content identification, although its impact on knowledge acquisition varies, with significant improvement observed in mathematics (Foster et al., 2015). Reflection benefits not only students but also teachers, as it can transform their teaching practices by influencing lesson planning, activity variation, and classroom management (Lefebvre et al., 2023).

The importance of reflection is further emphasized in game-based learning environments, where it is linked to skill and knowledge acquisition, and the depth of reflection is critical to maximizing learning outcomes (Cloude et al., 2021a). Moreover, dialogic reflection—supported by tools such as classroom discourse visualization—can foster collaborative learning and improve students’ problem-solving skills by encouraging multiple perspectives (Wang et al., 2025).

In teacher education, reflection is viewed as a collaborative communicative act that assists in constructing and expanding the objects of reflection, thereby enhancing professional development (Ottesen, 2007). Furthermore, designing games for reflection requires providing relevant contexts and enabling role-play, which can lead to higher levels of reflection and behavioral change

(Iacovides et al., 2022a). Overall, integrating reflection into educational practice, whether through game-based learning or teacher education, is essential for linking theoretical knowledge with practical application and fostering a deeper understanding of the values and concepts being taught.

Based on this premise, the reflection stage in this study was conducted immediately after the game activities concluded. The teacher facilitated a discussion session in which students were encouraged to share their experiences, the values they had learned, and how these related to their daily lives. This reflection process became a critical part of the CTL approach because it provided a space for students to recognize the meaning of their learning experiences and connect them to the Pancasila values being taught. The teacher also evaluated student responses as feedback for designing subsequent learning activities.

Overall, the implementation of CTL through *Gobak Sodor* and *Terompah* games demonstrated that learning involving direct experiences can shift students' paradigm from being mere recipients of information to becoming active participants in the learning process. Students' emotional and physical engagement in the games created an enjoyable learning situation, enabling Pancasila values to be understood not only cognitively but also internalized into their behavior. Thus, this approach significantly contributed to strengthening character education in schools.

B. Pancasila Values in Traditional Games

Traditional games such as *Gobak Sodor* and *Terompah* are deeply rooted in local culture and serve as effective media for instilling Pancasila values, including *gotong-royong* (mutual cooperation), responsibility, discipline, honesty, and teamwork. These games are not merely physical activities but are rich in educational values aligned with the principles of Pancasila, making them highly suitable for *Pancasila Education*.

The implementation of traditional games in educational settings has proven effective in promoting these values. For example, the traditional games of the Sasak ethnic group are closely connected to elements of nature, fostering a deeper understanding of ecological knowledge and harmony among individuals (Munir et al., 2020). Moreover, traditional games like *Gobak Sodor* have been adapted to enhance children's social skills, such as teamwork and communication, which are essential components of Pancasila values (Irmansyah et al., 2020). The preservation of traditional games through digital applications also plays a key role in safeguarding cultural heritage while educating children, thereby reducing the negative stigma often associated with digital games (Regiana et al., 2020).

In addition, traditional games have been found to improve cognitive processes and problem-solving skills, offering a holistic approach to child development that encompasses both physical and moral education (Widiana et al., 2018). Integrating these games into the educational curriculum not only supports the development of social and cognitive skills but also strengthens cultural identity and local wisdom—both essential for fostering a sense of community and national pride (Bauto, 2016).

Therefore, traditional games serve as valuable tools in education, promoting the natural internalization of moral values through their inherent rules and dynamics, and aligning closely with the foundational principles of Pancasila.

The *Gobak Sodor* and *Terompah* games exemplify the integration of cooperation, trust, discipline, and responsibility, reflecting the values taught in Pancasila. In *Gobak Sodor*, the need for cooperation and trust among team members aligns with the findings of Jansson et al., who emphasize the role of trust in enhancing cooperation in coordination games, where mutual benefits are achieved through strategic collaboration (Jansson et al., 2015). This is further supported by Le Bars and Chambon, who highlight the importance of strategic cooperation and motor coordination in joint actions, demonstrating that successful team dynamics rely on the interplay of these elements (Bars et al., 2022).

The game also reflects the concept of commitment and shared intentions as described by Levesque et al., in which team members must be aware of and committed to the collective goals of the group (Levesque et al., 1990). In *Terompah*, the emphasis on discipline and responsibility is similar to the structured cooperation seen in multi-agent systems, where agents must manage their actions harmoniously to achieve a common objective (Griffiths et al., 2003).

This game also reflects the findings of Andersson and Wengström, who noted that credible communication and pre-play strategies are crucial for maintaining cooperation, underscoring the importance of discipline in both communication and action (Andersson et al., 2012). Furthermore, the need for synchronized actions in *Terompah* aligns with Hamilton et al.'s observations on the importance of synchronized communication and coordinated actions in team games (Hamilton et al., 2009). Both games, through their emphasis on cooperation, trust, discipline, and responsibility, embody the principles of Pancasila, fostering a spirit of unity and collective effort among participants.

The concept of honesty and its reinforcement through social interaction and play has been explored across various studies. Honesty in group settings can be influenced by the presence of rule enforcers, which reduces collaborative cheating and promotes honest behavior within the group, as individuals resist the temptation to engage in dishonest acts even when such acts are not explicitly sanctioned (Gross et al., 2021). This aligns with the observation that students often correct peers attempting to break the rules, indicating a process of internal social control that naturally emerges from collective awareness. Such processes are particularly important in educational contexts, where interventions aimed at promoting ethical behavior through group activities have shown that students with a higher propensity for unethical conduct can be guided toward honesty through participatory learning and discussion (Alonso et al., 2025). Moreover, prosocial values and intrinsic motivation play a significant role in reducing academic misconduct, suggesting that fostering these values can enhance ethical behavior among students (Kasler et al., 2023).

The dynamics of honesty are further complicated by social norms, which can either promote or hinder honest behavior depending on their strictness and the social context (Aycinena et al., 2022). For example, overly rigid norms can paradoxically lead to increased dishonesty, as individuals may fail to perceive differences in the severity of lies (Aycinena et al., 2022). In addition, mechanisms of social control, such as peer punishment, can enforce norms but may also perpetuate harmful behaviors if the norms themselves are detrimental (Abbink et al., 2017). The interplay of conformity, identity, and social influence also shapes the spread of honest behavior, with conformity promoting honesty in simpler social structures but potentially leading to dishonesty in more complex environments (Cremene et al., 2021). These findings highlight the importance of designing educational and social interventions that leverage the natural emergence of social control and prosocial values to cultivate honesty and cooperation—values that reflect the *gotong royong* principle and the ideals of Pancasila in everyday life.

Accordingly, student reflections after the activities demonstrated a deeper understanding of Pancasila values. During discussion sessions, students were able to independently identify the values they had experienced during the games and relate them to life at school and at home. For instance, several students mentioned the importance of listening to teammates when devising strategies or recognized that breaking the rules in the game could harm the entire group. This indicates that students not only understood the values conceptually but also experienced them firsthand.

Furthermore, learning experiences through traditional games created space for students to feel valued and heard. When invited to reflect on their experiences, a collective awareness emerged that the values they learned were not foreign or imposed but were part of their daily lives. Thus, this approach made Pancasila values more vivid and contextual within the learning process, while simultaneously strengthening students' character as part of a transformative civic education.

C. Impact on Learning Outcomes

The implementation of contextual learning based on traditional games in *Pancasila Education* (Civic Education in the Indonesian context) has demonstrated significant positive impacts on students' learning achievement, particularly in the cognitive and affective domains. Traditional games such as *Gobak Sodor* and *Terompah* play a crucial role in activating critical thinking and decision-making processes, which are essential for understanding and internalizing Pancasila values beyond mere theoretical memorization. These games facilitate a learning environment where students can directly experience values such as responsibility, honesty, and cooperation, thereby enhancing their conceptual understanding and the application of these values in real-life contexts.

Research has shown that traditional games significantly improve cognitive processes by encouraging active participation and communication among students, as opposed to conventional learning methods that often result in passive learning experiences (Widiana et al., 2018). Furthermore, integrating traditional games into educational settings has been shown to foster deeper

connections with cultural and ecological knowledge, as these games often incorporate natural elements and local cultural practices, thereby enriching students' learning experiences and understanding of their environment (Munir et al., 2020).

The effectiveness of game-based learning is further supported by meta-analyses and empirical studies, which indicate that such approaches lead to higher academic achievement, increased motivation, and greater engagement among students (Karakoç et al., 2022; Amzalag et al., 2024). In addition, inquiry-based and ubiquitous game designs have been found to promote critical thinking and problem-solving skills, further supporting students' cognitive and affective development (Hwang et al., 2017). Overall, the use of traditional games in *Pancasila Education* not only enhances students' academic achievement but also fosters essential life skills and values, making it a valuable pedagogical approach in contemporary education.

The affective aspect of learning, especially when students engage in real-life experiences, significantly enhances their enthusiasm and engagement in the educational process. This is supported by findings from various studies that highlight the importance of emotions in learning environments. For example, affective education, which focuses on learners' emotional well-being and attitudes, has been shown to foster positive attitudes and increase participation and initiative among students, as noted in a European collaborative research project (Puurula et al., 2001). The *Positive Attitude Towards Teaching* framework in higher education further emphasizes the emotional dimension as critical for empowering quality teaching, indicating that fostering positive emotions can enhance teaching effectiveness and student engagement (Miočić et al., 2020).

Moreover, the integration of social and emotional learning into educational settings has been linked to improved student outcomes, including better engagement and achievement (Mok, 2019). Affective learning experiences, such as those involving student team learning methods, have been shown to positively affect students' friendships, self-esteem, and academic performance, suggesting that collaborative and experiential learning can effectively engage students emotionally (Slavin et al., 1981). Additionally, the quality of teacher-student relationships plays a vital role in student engagement, with positive relationships leading to higher levels of involvement and achievement (Roorda et al., 2011). The emotional landscape of learning, especially in self-regulated and co-regulated learning contexts, also highlights the dominance of positive emotions such as enthusiasm, which are essential for effective learning (Saariaho et al., 2018). Finally, emotional intelligence has been identified as a key factor in student engagement and success, with higher EI levels correlating with better academic outcomes and satisfaction in higher education (Zhoc et al., 2020). Collectively, these studies underscore the importance of addressing the emotional aspects of learning to foster more engaging and effective educational experiences.

The emergence of reflective behavior among students participating in game-based learning is a significant outcome, as it not only enhances conceptual understanding but also facilitates the internalization and application of values in real-life contexts. In Lavega's research, traditional games such as *la pelota sentada* have been shown to foster reflective skills and democratic social encounters among students, enabling them to identify and practice values such as responsibility and discipline in various settings, including school, family, and social environments (Luchoro-Parrilla et al., 2024).

Game designs that encourage reflection are critical, as demonstrated by studies in which role-playing as characters different from oneself—yet relatable—enhanced the depth of reflection, making the experience more relevant to players' lives (Iacovides et al., 2022b). Personal values significantly influence learning approaches and academic achievement, suggesting that integrating value education into learning strategies can produce well-rounded graduates capable of applying these values in everyday life (Gamage et al., 2021). Furthermore, the impact of games on social practices highlights their role in shaping communication and teamwork skills, which are crucial for applying learned values in social contexts (Khanmurzina et al., 2019).

The *Good Behavior Game*, for instance, has been effective in reducing disruptive behavior and promoting social validity, indicating that structured game-based interventions can reinforce positive behaviors and values (Kleinman et al., 2011). Additionally, the integration of educational values through traditional games, as observed in the Sasak community's practices, underscores the importance of cultural and ecological knowledge in value education, further supporting the application of these values in real-world scenarios (Munir et al., 2020). Overall, these findings emphasize the potential of game-based learning environments not only to enhance academic engagement but also to cultivate reflective, value-driven behavior that students can apply beyond the classroom (Cloude et al., 2021b).

Nevertheless, the implementation of this model is not without challenges. One of the main constraints is the limited classroom time, which is often insufficient to conduct the games thoroughly and optimally. Teachers must manage time carefully to ensure that the games do not encroach on time allocated for other subjects, while also making sure that the targeted values are truly understood by students through concise yet meaningful activities.

Facilities also pose a challenge. Some traditional games require open spaces and simple equipment that may not always be available in the school environment. Furthermore, the physical limitations of classroom space can be an obstacle for games that require free movement. Teachers often address this by modifying the games to be conducted within available classroom space or utilizing the schoolyard at specific times.

Teacher readiness in designing game-based learning is also crucial to the effectiveness of this approach. Not all teachers are familiar with experimental and interactive methods. Training and mentoring are necessary to enable teachers to design activities aligned with learning objectives and to accurately assess the attainment of targeted values. Nevertheless, the high enthusiasm of students and the demonstrated improvement in learning outcomes provide additional motivation for teachers to continue developing this approach in the future.

IV. CONCLUSION

The Contextual Learning model based on traditional games has proven effective in enhancing students' understanding and internalization of Pancasila values in junior high school. The *Gobak Sodor* and *Terompah* games not only create an active and enjoyable learning atmosphere but also serve as contextual and meaningful media for conveying values such as cooperation, discipline, responsibility, and honesty. This approach successfully transforms learning from being primarily theoretical into a direct, reflective experience that leaves a lasting impact on the affective, cognitive, and social domains.

To support the effectiveness of this approach, schools need to provide adequate facilities, adjust instructional time, and offer teacher training to enable the design and evaluation of game-based learning effectively. Furthermore, the model can be further developed by exploring other traditional games that embody noble local cultural values, allowing *Pancasila Education* to be delivered in a more contextual, adaptive, and relevant manner to students' realities.

1. Recommendation

The integration of the Contextual Learning model with traditional games such as *Gobak Sodor* and *Terompah* has proven to improve the quality of *Pancasila Education* at the junior high school level. Through this approach, students not only understand Pancasila values conceptually but also internalize them through enjoyable and participatory real-life experiences. Learning becomes more dynamic, meaningful, and impactful both affectively and socially, as students actively engage in situations that reflect values such as cooperation, discipline, responsibility, and honesty.

For this approach to be applied more widely and sustainably, it is necessary to provide teacher training to enhance their competence in designing and implementing creative, culturally based contextual learning. Teachers should be equipped with pedagogical strategies that enable them to adapt traditional games into the formal curriculum while being able to evaluate value attainment holistically. Additionally, active teacher involvement in the planning and reflection stages is a key factor in the successful implementation of this model.

School support is also crucial, both in providing supporting facilities and infrastructure and in organizing flexible learning schedules. Schools are expected to create space for innovative learning models rooted in local culture and character. To enrich the study and broaden the benefits of this approach, further research should explore other traditional games and assess their effectiveness across different educational levels. In this way, *Pancasila Education* can be actualized in a contextual manner while remaining deeply rooted in the nation's cultural heritage.

REFERENCES

- [1] K. Abbink, L. Gangadharan, T. Handfield, and J. Thrasher, "Peer punishment promotes enforcement of bad social norms," *Nature Communications*, vol. 8, no. 1, p. 609, Apr. 2017, doi: 10.1038/s41467-017-00731-0.
- [2] F. Almeida, H. Bolaert, S. Dowdall, J. Lourenço, and P. Milczarski, "The WalkAbout framework for contextual learning through mobile serious games," *Education and Information Technologies*, vol. 20, no. 3, pp. 415–428, May 2015, doi: 10.1007/s10639-013-9292-6.
- [3] M. A. Alonso and I. S. Gallo, "Ethical Behavior Intervention Through Group Activities in Secondary Education," *Psychology in the Schools*, vol. 62, no. 3, pp. 931–940, Mar. 2025, doi: 10.1002/pits.23366.
- [4] M. Amzalag, D. Kadusi, and S. Peretz, "Enhancing Academic Achievement and Engagement Through Digital Game-Based Learning: An Empirical Study on Middle School Students," *Journal of Educational Computing Research*, vol. 62, no. 5, pp. 989–1013, 2024, doi: 10.1177/07356331241236937.
- [5] O. Andersson and E. Wengström, "Credible communication and cooperation: Experimental evidence from multi-stage games," *Journal of Economic Behavior & Organization*, vol. 81, no. 1, pp. 207–219, Jan. 2012, doi: 10.1016/j.jebo.2011.10.002.
- [6] D. Aycinena, L. Rentschler, B. Beranek, and J. F. Schulz, "Social norms and dishonesty across societies," *Proceedings of the National Academy of Sciences*, vol. 119, no. 31, Aug. 2022, doi: 10.1073/pnas.2120138119.
- [7] B. Ballon and I. Silver, "Context is key: an interactive experiential and content frame game," *Medical Teacher*, vol. 26, no. 6, pp. 525–528, Sep. 2004, doi: 10.1080/01421590412331282282.
- [8] D. Barker, T. Wallhead, and M. Quennerstedt, "Student learning through interaction in physical education," *European Physical Education Review*, vol. 23, no. 3, pp. 273–278, Aug. 2017, doi: 10.1177/1356336X16640235.
- [9] S. Le Bars, S. Bourgeois-Gironde, V. Wyart, I. Sari, E. Pacherie, and V. Chambon, "Motor Coordination and Strategic Cooperation in Joint Action," *Psychological Science*, vol. 33, no. 5, pp. 736–751, May 2022, doi: 10.1177/09567976211053275.
- [10] L. M. Bauto, "Socio-cultural values as community local wisdom Katoba Muna in the development of learning materials social studies and history," *Historia: Jurnal Pendidikan dan Penelitian Sejarah*, vol. 14, no. 2, p. 195, 2016, doi: 10.17509/historia.v14i2.2027.
- [11] E. B. Cloude, D. Carpenter, D. A. Dever, R. Azevedo, and J. Lester, "Game-Based Learning Analytics for Supporting Adolescents' Reflection," *Journal of Learning Analytics*, vol. 8, no. 2, pp. 51–72, Aug. 2021, doi: 10.18608/jla.2021.7371.
- [12] L. Cremene and M. Cremene, "The Social Honesty game - A computational analysis of the impact of conformity and identity on honest behavior contagion in complex social systems," *Chaos, Solitons & Fractals*, vol. 144, p. 110710, Jun. 2021, doi: 10.1016/j.chaos.2021.110710.
- [13] A. Foster and M. Shah, "The Play Curricular Activity Reflection Discussion Model for Game-Based Learning," *Journal of Research on Technology in Education*, vol. 47, no. 2, pp. 71–88, 2015, doi: 10.1080/15391523.2015.967551.
- [14] K. A. A. Gamage, D. M. S. C. P. K. Dehideniya, and S. Y. Ekanayake, "The Role of Personal Values in Learning Approaches and Student Achievements," *Behavioral Sciences*, vol. 11, no. 7, p. 102, 2021, doi: 10.3390/bs11070102.
- [15] E. Gandolfi, "Playing is just the beginning: Social learning dynamics in game communities of inquiry," *Journal of Computer Assisted Learning*, vol. 38, no. 4, pp. 1062–1076, Aug. 2022, doi: 10.1111/jcal.12663.
- [16] N. Griffiths and M. Luck, "Coalition formation through motivation and trust," in *Proc. 2nd Int. Joint Conf. Autonomous Agents and Multiagent Systems*, 2003, pp. 17–24, doi: 10.1145/860575.860579.

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- [17] J. Gross and C. K. W. De Dreu, "Rule Following Mitigates Collaborative Cheating and Facilitates the Spreading of Honesty Within Groups," *Personality and Social Psychology Bulletin*, vol. 47, no. 3, pp. 395–409, Mar. 2021, doi: 10.1177/0146167220927195.
- [18] W. A. Hamilton, P. O. Toups Dugas, and A. Kerne, "Synchronized communication and coordinated views," in *CHI '09 Extended Abstracts on Human Factors in Computing Systems*, 2009, pp. 4573–4578, doi: 10.1145/1520340.1520702.
- [19] G. Hwang and C. Chen, "Influences of an inquiry-based ubiquitous gaming design on students' learning achievements, motivation, behavioral patterns, and tendency towards critical thinking and problem solving," *British Journal of Educational Technology*, vol. 48, no. 4, pp. 950–971, Jul. 2017, doi: 10.1111/bjet.12464.
- [20] I. Iacovides, J. Cutting, J. Beeston, M. E. Cecchinato, E. D. Mekler, and P. Cairns, "Close but Not Too Close: Distance and Relevance in Designing Games for Reflection," *Proc. ACM Hum.-Comput. Interact.*, vol. 6, no. CHI PLAY, pp. 1–24, Oct. 2022, doi: 10.1145/3549487.