Ecoment Global Journal

Vol. 9 No. 3 (2024): Edisi Desember 2024
P-ISSN : 2540-816X E-ISSN : 2685-620

Educational Games and Ice Breaking in Scienci Learning for student of Madrasah Ibtidaiyah/Elementary Schools

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Abstract

Objective: *Problems frequently observed in educational activities among students of Madrasah Ibtidaiyah or Elementary Schools, particularly in science learning, include low motivation, limited concentration, exhaustion, and boredom when participating in classroom learning processes.*
Design/Methods/Approach: *The method employed in this study is a qualitative approach. The research approach utilized is a library research method involving in-depth observation and analysis of scientific article sources centered on literature review*
Findings: *Efforts that can be implemented to address these challenges involve educators needing to introduce strategies capable of enhancing focus capacity and student motivation within the classroom environment, such as utilizing educational games and ice-breaking activities. This academic work aims to examine the application of educational games and ice-breaking in science learning activities for MI/SD students.*
Originality/Value: *This academic work aims to examine the application of educational games and ice-breaking in science learning activities for MI/SD students.*
Practical/Policy implication: *Based on these findings, it can be concluded that the learning process through educational games and ice-breaking activities in science learning for Madrasah Ibtidaiyah or Elementary School students is highly appropriate for implementation in classroom teaching activities because educational games and ice-breaking are capable of optimizing motivation, focus, enthusiasm, interest, concentration, and learning outcomes of students during the science learning process in the classroom.*

Keywords: Education Games , Ice Breaking and Elementary Science Education

JEL Classification: M42, M48 [author should add 1-3 JEL classification number, information guide for the Journal of Economics Literature (JEL) can be found at https://www.aeaweb.org/jel/guide/jel.php]

Received December 13, 2024; Received in revised form: December 21, 2024 Accepted: December 27. 2024

Note: The maximum length of the abstract is 300 words, or it must not exceed the first page

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P-ISSN : 2540-816X E-ISSN : 2685-620

Introduction

Natural Sciences, known as a scientific discipline, represents a comprehensive investigative approach that examines the dynamic interrelationships between living organisms and inanimate entities within the universal domain, including human interactions with their surrounding environment, encompassing human life in both individual and societal capacities (Fatah, P. R., Kisai, A. A., Nurkholis, N., & Labudasari, 2023). Natural Sciences education is initially introduced to students at the Elementary School or Islamic Elementary School level. The age range of students in these educational institutions typically spans from 6 to 12 years, a period characterized as childhood a transitional phase between early childhood and adolescence. This developmental stage corresponds to the concrete operational phase, wherein students predominantly engage with tangible, concrete conceptualizations (Delimanugari, 2018). Classroom instructional activities for Elementary School students, particularly within Natural Sciences learning domains, demand optimal attention and rigor, especially when exploring substantive, empirical materials. Students frequently experience diminished focus and learning engagement, particularly during midday periods, with many exhibiting signs of fatigue and somnolence. Such conditions may arise from multiple factors, including students' intellectual and cognitive reasoning capabilities (Marzatifa, L., Agustina, M., & Inayatillah, 2021). Addressing these challenges necessitates significant pedagogical intervention from educators. Elementary School students prefer engaging learning processes incorporating playful methodologies and concrete, tangible instructional resources (Hijriati, 2021).

The findings indicate that within classroom teaching processes, implementing learning approaches through play activities and utilizing concrete instructional objects can be optimized to help develop the intellectual capacity and analytical capabilities of primary school (Madrasah Ibtidaiyah or Elementary School) students. Educators can implement several strategies, including integrating educational game methods in the classroom and applying ice-breaking techniques during the learning process, particularly in science education domains for primary school students. Educational game-based learning represents an engaging teaching approach that can be applied to students and is expected to stimulate students' focus capacity and motivation during classroom learning interactions. Educational games are systematically designed activities to train students to enhance concentration throughout the teaching-learning processes. They are structured to stimulate students' thinking abilities, rendering them more dynamic and creative (Mufidah, E., & Lestari, 2022).

Moreover, educational game-based learning methods can be combined with ice-breaking techniques to optimize student concentration and motivation throughout classroom learning processes. Ice-breaking techniques represent an approach that educators can implement during teaching activities at initial and mid-interaction educational phases. The purpose of implementing ice-breaking is to prepare students more effectively for lesson absorption, alleviate psychological tension, and enhance students' motivational drive and attentional focus (Fatihani, N., Iswandi, I., 2024). Consequently, strategies educators can pursue to enhance focus, concentration, and learning motivation among primary school students, particularly in science

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P-ISSN : 2540-816X E-ISSN : 2685-620

education, involve implementing game-based learning methods and utilizing ice-breaking techniques during classroom interaction.

Literature Review and Hypotheses Development

Referencing research from multiple scientific publications, it was found that teaching processes utilizing educational games such as Snake and Ladders in natural sciences learning domains and implementing ice-breaking techniques during classroom instructional activities can optimize students' interest, learning outcomes, emotional intelligence, focus, concentration, and learning motivation at both Madrasah Ibtidaiyah and Elementary School levels and addressing classroom challenges frequently observed, particularly among students in Madrasah Ibtidaiyah or Elementary School settings, significant obstacles in natural sciences learning processes are often encountered. These conditions are characterized by students exhibiting signs of learning fatigue, diminished attentiveness, low interest and motivation, and difficulties maintaining concentration. Consequently, such situations can result in limited student comprehension of instructional content and potentially decrease overall learning achievement.

Natural Sciences (from now on referred to as Science Education) represents a knowledge systematically structured around natural phenomena, comprising a comprehensive collection of facts, concepts, and principles derived through rigorous experimental activities and systematic observations. Science Education can function as a conduit for students to investigate and comprehensively explore their surrounding environment, subsequently applying these insights to everyday activities. Educators are expected to optimize students' potential within the Science Education domain by providing empirical experiences that enable deep exploration of environmental phenomena (Juhaeni, J., Wiji, S., Wadud, A. J., Saputra, H., Azizah, I. N., & Safaruddin, 2022). Students at the elementary school or Madrasah Ibtidaiyah level are currently traversing a developmental period characterized by progressive social, intellectual, and personal maturation (Oviyanti, 2014). During this foundational educational stage, students demonstrate a pronounced inclination towards entertaining, engaging, and uniquely captivating activities. They exhibit a remarkably high intrinsic motivation and profound curiosity toward novel learning experiences, significantly enhancing their motivation, focus, and concentration throughout classroom learning (Wulandari, R., Susilo, H., & Kuswandi, 2017). One strategic approach educators can implement to address these developmental characteristics involves applying learning methodologies capable of stimulating enthusiasm and enjoyment, mainly through educational game-based techniques tailored explicitly to Science Education instruction.

According to (Syamsuardi, 2012), educational games represent carefully designed and structured play activities developed by educators and utilized within the learning process to

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P-ISSN : 2540-816X E-ISSN : 2685-620

enhance students' enthusiasm, diversity, and interest in classroom learning activities. These educational games enable students to learn through play, functioning simultaneously as an instructional intervention that makes learning more engaging and stimulating and prevents monotonous or potentially fatiguing educational experiences. Such educational games employ teaching instruments whether modern or traditional that can significantly enhance students' learning experiences and educational development.

The Snakes and Ladders game is one of the frequently applied educational game variants in the learning process, particularly in science education. Snakes and ladders are a traditional activity widely recognized across the Indonesian archipelago. This game activity can be conducted by two or more individuals utilizing specific equipment, including a snakes and ladders board, dice, and game pieces referring to (Wati, 2021). The instructional process employing snakes and ladders as a learning medium can create an enjoyable and entertaining learning environment, potentially influencing students' socio-emotional dynamics and facilitating positive interactions among classroom participants (Marlinah, M., & Priyanti, n.d.). An alternative instructional approach can be implemented by applying educational games utilizing crossword puzzles, commonly known as TTS (Teka-Teki Silang). Crossword puzzles represent a pedagogical instrument that captures students' attention by arranging empty boxes with an engaging design and integrated answers. Through this TTS medium, students become actively engaged in the teaching-learning process, experiencing enhanced enjoyment, concentration, motivation, and focus, which ultimately has the potential to optimize learning outcomes (Indarto, 2018).

The research findings reveal that implementing educational gaming methods, such as crossword puzzles, can optimize teaching-learning interaction dynamics, rendering them more productive and engaging by stimulating students' learning interests. Crossword puzzle activities (TTS) demonstrate the potential for developing students' long-term memory capacity regarding subject matter through concentration enhancement, wherein the game's answers exhibit interconnectedness and continuity across elements, thereby communicating research-based terminology comprehensively and systematically (Juhaeni, J., Wiji, S., Wadud, A. J., Saputra, H., Azizah, I. N., & Safaruddin, 2022). The spinning wheel game is another frequently applied educational gaming variation in classroom interaction.

Method

This study employs a library research methodology implemented through article analysis. The library research procedure represents an investigative approach wherein research data is obtained by utilizing and leveraging library references and literature. A distinctive

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characteristic of this library research is the direct interaction of the researcher with source manuscripts serving as information repositories (Sugiyono, 2020). The library research method was conducted by observing and analyzing related article sources centered on literature. The research is qualitative, presenting descriptions and explanations through a descriptive-analytical framework. Research findings were derived through a comprehensive analysis of prior scientific publications addressing teaching strategies that utilize educational games and ice-breaking activities within science instruction environments for students in Elementary School and Madrasah Ibtidaiyah educational settings.

Result and Discussion

The research findings were obtained through an in-depth investigation of multiple scholarly works on teaching strategies utilizing educational games and ice-breaking techniques in science learning processes within Madrasah Ibtidaiyah and Elementary School environments. In the scientific article “Efforts to Enhance Students' Emotional Intelligence through Traditional Snake and Ladder Games in Science Subjects at SDN 024 Tarai Bangun,” a significant increase was observed in students' emotional intelligence capacity following the intervention using traditional Snake and ladder games. The research documented a quantitative change from a pre-intervention score of 46.95% to 75.43% in the post-intervention phase, which was categorized within a favorable achievement range (Sunarti, 2023). Similarly, the research “Implementation of Educational Game Learning Methods on Science Learning Outcomes at SDN Sungai Miai 7 Banjarmasin” elaborated that science learning achievements through educational game methods at the research site significantly improved across each teaching session. This was substantiated by calculating mean scores and group completion percentages, which developed from 65% to 80%(Lestari, N. C., Hidayah, Y., & Zannah, 2023) .

A study conducted (Suniyati, S., Dermawan, H., & Sumantri, 2022) titled “Strategies for Developing Student Enthusiasm and Academic Achievement in Science Learning Activities through Ice-Breaking Implementation in 4th Grade at Puspasari State Madrasah Elementary School” revealed findings indicating that ice-breaking implementation can enhance student learning motivation in science education at the 4th-grade level of Puspasari State Elementary School. This investigation was substantiated by an increase in the average percentage of learning interest survey scores, transforming from 70% to 85%. A complementary study with the theme “Application of Ice Breaking Techniques in Learning Processes at SD 64/I Muara Bulian” generated findings demonstrating that ice-breaking activities conducted by educators during learning sessions produce constructive effects, effectively restoring students' learning

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enthusiasm, focus, concentration, and academic engagement throughout classroom instructional periods (Noviyanti, S., Sari, D. E. P., & Tanti, 2022).

A related study titled “Improving Science Learning Outcomes Using Snakes and Ladders Game Media in Madrasah Ibtidaiyah” revealed that the implementation of the Snakes and Ladders game media in science learning processes has been proven to significantly optimize students' academic achievement, with percentage improvements ranging from 9.1% to 81.82% (Ulfa, M., & Nadhif, 2022). Subsequent research entitled “Efforts to Enhance Student Interest and Learning Outcomes through Educational Games in Thematic Science Learning for 5th Grade at Masjid Syuhada Elementary School” demonstrated that utilizing educational games within the thematic science learning framework for 5th-grade students effectively increased student enthusiasm and academic performance, with percentage improvements from 28% to 80% (Hartati, S., Fatmawati, L., & Krismilah, 2020).

A research study investigating the Implementation of Ice Breaking to Enhance Learning Concentration among Third-Grade Students at MI Muhammadiyah 28 Surabaya revealed that using Ice Breaking techniques in classroom learning activities significantly contributes to sharpening focus and improving student concentration. This approach successfully created an enjoyable learning environment where students did not feel burdened but instead experienced joy through the implementation of ice-breaking methods in the learning process (Fauzi, M. I. R., & Faradita, 2024). Research conducted by (Fajarudin, A. A., & Samsudi, 2021), which examined ice-breaking techniques as a support for motivation and concentration among first-grade students at Nurul Islam Islamic Elementary School, uncovered findings indicating that implementing ice-breaking techniques in classroom learning processes can optimize students' learning capacity and encourage them to become highly enthusiastic and improve their concentration during learning activities.

Conclusion and future direction

Referencing the research findings, implementing educational games and ice-breaking activities in natural sciences instruction for elementary and Islamic elementary school students demonstrates exceptionally high significance throughout classroom teaching activities. These methodological interventions can optimize students' capacity for focus, concentration, interest, motivation, and enthusiasm during learning. Consequently, students who previously experienced diminished focus, saturation, and boredom can be re-stimulated and re-engaged in receiving and exploring instructional content due to the dynamic, engaging, and entertaining application of educational games and ice-breaking techniques. This approach effectively motivates students, enhancing their academic performance and learning outcomes, particularly

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P-ISSN : 2540-816X E-ISSN : 2685-620

within the natural sciences domain. The selection of educational games and ice-breaking activities must be carefully scrutinized to ensure alignment with the specific research content and to facilitate students' comprehensive understanding and mastery of classroom instructional materials. Identifying enabling and inhibiting factors in implementing these educational methods can serve as a foundational framework for continuous pedagogical refinement and development, specifically aimed at elevating the enthusiasm and motivation of elementary and Islamic elementary school students during natural sciences instruction.

Implication

In its implementation, the spinning wheel game activity effectively generates more dynamic student interaction, stimulates learning enthusiasm, optimizes active classroom participation, and creates a more dynamic and engaging teaching-learning environment. The advantages of implementing this educational spinning wheel game in the learning process encompass several significant aspects. This method successfully elicits student responses, facilitates their comprehension of instructional material, and encourages curiosity by aligning available information with visual representations. Consequently, students can explore course content more comprehensively. Furthermore, this approach is crucial for enhancing student self-confidence and optimizing cognitive responses.

Moreover, this learning strategy creates spaces for active participation, allowing students to fully engage in the learning process dynamics (Inayah, N., & Prayogo, 2023). Beyond its benefits, several distinctive advantages of this educational spinning wheel game can be identified. These advantages include aspects of safety and operational ease within the learning process. Students experience increased comfort during learning activities, as they can enjoy the learning process through a play-based approach. This method significantly optimizes learning process dynamics and supports student learning motivation.

Additionally, the approach successfully cultivates a sense of responsibility among students. The utilized media is concrete and demonstrates notable flexibility, applicable across various subject domains, not limited to science education. This method empowers students to re-express course material using their language. This approach effectively enhances students' ability to maintain focus and develop active communication skills (Inayah, N., & Prayogo, 2023).

The educational game-based learning method offers several notable advantages. First, learners acquire insights and experiences that are difficult to forget, as the studied material is genuinely experienced concretely rather than purely intellectual knowledge. Second, learners can receive research content in an enjoyable manner, with minimal potential for rejection or disengagement, since the game-based activity is designed to evoke joy and provide

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entertainment. Third, educational learning methods can stimulate significant interest and motivation toward specific topics or materials and develop learners' skills through a well-designed educational learning method (Delimanugari, 2018). Beyond implementing educational gameplay, ice-breaking activities in learning processes should also be pursued and implemented for students at the Madrasah Ibtidaiyah or Elementary School levels, particularly within science education domains.

Ice Breaking represents an instructional activity conducted during the learning process, consisting of a simple intervention designed to transform students' psychological conditions of saturation, lethargy, and drowsiness within the classroom. The ice-breaking activity intends to stimulate a more dynamic, interactive, engaging, and enjoyable learning atmosphere, enabling students to demonstrate active participation and high enthusiasm in absorbing instructional content, particularly within natural sciences learning domains. Implementing ice-breaking in the learning process is expected to optimize students' comprehension of science or natural sciences materials (Maulida, R. A., & Maslikhah, 2022). This statement aligns with research findings by (Harianja,&Sapri 2022), which reveal that ice-breaking implementation can enhance students' cognitive capacity, learning motivation, and academic achievement. The ice-breaking method has proven to contribute positively by alleviating students' experiences of drowsiness, saturation, and mental fatigue. Furthermore, ice-breaking can be integrated across various educational contexts, encompassing both formal and non-formal domains, and can be applied across multiple study disciplines, with natural sciences serving as a prominent example.

Ice breaking has proven to be an activity capable of exerting significant influence in establishing a comfortable and conducive teaching environment. The previously monotonous teaching process, characterized by limited student engagement, tension, and drowsiness, can transform into a more enjoyable, calm, dynamic, and passionate atmosphere. Consequently, the teaching process that has integrated ice breaking successfully creates a learning environment that is simultaneously serious yet relaxed, dynamic, enthusiastic, enjoyable, and energetic for all students (Maulida, R. A., & Maslikhah, 2022). Ice-breaking activities can be conducted at the initial stage of classroom learning processes to stimulate learning enthusiasm, enhance concentration, and alleviate student fatigue. Furthermore, ice-breaking can be introduced in the mid-learning sequence and can be applied to conclude learning activities with a more meaningful and pleasant ambiance (Zakiyyah, D., Suswandari, M., & Khayati, 2022).

Ice breaking describes a dynamic transformation in student participants' learning environment, where an initially monotonous, tense, and soporific instructional process transitions into a condition characterized by passionate engagement, enjoyment, relaxation, and

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enthusiastic deep attention to the source presenter in the classroom (Maulida, R. A., & Maslikhah, 2022). In implementing ice-breaking during teaching activities within the classroom environment, diverse approaches can be applied, including humor, traditional poetic verses, inspirational expressions, musical variations, rhythmic clapping, game-based activities, movement exercises, narrative discourse, audiovisual media utilization, and various other methodological interventions (Khoerunisa, 2020).

The sequence of teaching activities implementing ice breaking is grounded in several fundamental principles: effectiveness, motivational stimulation, harmonization, proportionality, contextuality, respect for social norms, and maintaining civility. In the pedagogical effectiveness dimension, reinforcement of established pedagogical approaches is essential to optimize learning outcomes. Expanding and cultivating student motivation after implementing teaching strategies constitutes the primary objective of utilizing ice-breaking techniques. Harmonization must also be carefully considered in ice-breaking implementation, ensuring that selected topics are congruent and aligned with the research material under discussion, wherein ice-breaking represents an integral, inseparable component of the comprehensive learning process.

Ice-breaking activities should be implemented judiciously to avoid diminishing motivational drive in the learning process, ensuring that such activities proceed enjoyably. The execution of ice breaking must be undertaken with careful consideration of appropriate contexts and should not be implemented arbitrarily, as this could create a less conducive learning environment. Ice-breaking activities integrated into the learning process should not contain elements that might offend religious beliefs, ethnic backgrounds, personal identities, or group differences and are expected to contribute positively to efforts to strengthen unity and cohesion. The selection of ice-breaking techniques within the learning process framework must carefully consider diverse activities that can be well-received, are educational, and do not contain inappropriate content (Fajarudin, A. A., & Samsudi, 2021).

The learning process involving ice-breaker activities presents several inhibiting and supporting factors in its implementation. Learning and applying these techniques to students requires extended time due to the alternating daily implementation with student groups. Educators must strive to create more productive and optimal teaching-learning processes by not limiting themselves to one or two instructional approaches but instead leveraging diverse instructional strategies, including varied ice-breaker activities integrated into learning sessions. Furthermore, when students exclusively focus on ice-breakers provided by their instructors, they may need help comprehending course material due to diminished learning motivation and concentration. Observations reveal that during ice-breaker implementation, some students

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P-ISSN : 2540-816X E-ISSN : 2685-620

engage in playful behaviors that potentially disrupt the learning process, compromising the activity's educational objectives. The translation maintains the original text's scholarly tone, preserves its analytical approach, and provides a clear, precise rendering of the Indonesian academic discourse on pedagogical techniques.

Several students demonstrated uncontrolled behavior, disrupting peer interactions and engaging in individual conversations during educators' instructional delivery, particularly during ice-breaker activities. Several students appeared to need more comprehensive understanding, and it proved challenging to coordinate during classroom learning. During the ice-breaker implementation stage, students were reluctant to participate in movement sequences due to diminished motivation and enthusiasm, compelling educators to design strategies capable of rekindling interest, restoring concentration, and reigniting student engagement in learning activities. Fundamentally, the primary challenge lies in students' tendency to focus solely on the ice-breaker mechanism without genuinely comprehending the substantive content presented by educators, as articulated in (Sonia, G., Wijayatiningsih, T. D., Mulyadi, D., Ifadah, M., Aimah, S., Budiastuti, R. E., ... & Sriprasert, n.d.) research. Beyond these inhibiting factors, several supportive elements also exist in implementing classroom ice-breaker activities.

The driving components in implementing ice-breaking activities encompass the reality that learners demonstrate more optimal readiness to engage in learning sequences when such activities are conducted in the classroom. Students appear more prepared during the learning process due to the emergence of positive emotional experiences encountered while participating in ice-breaking interventions. During classroom learning, learners experience comfort and are shielded from psychological pressure, as they exhibit enthusiastic attitudes when ice-breaking techniques are applied in pedagogical contexts. Throughout the learning process, students display high motivation when learning activities are in progress since the application of group motivational chants and interactive games in the classroom effectively enhances their enthusiasm and joy. Most learners adapt well to peer groups and educators during the learning process. Implementing ice-breaking methods in pedagogical approaches has proven effective in helping students comprehend the course material more rapidly and improve their preparedness for learning activities (Fauzi, M. I. R., & Faradita, 2024).

References

Delimanugari, D. (2018). Pengembangan Media Permainan Ilmu Pengetahuan Alam untuk Meningkatkan Minat dan Hasil Belajar MI/SD di Gunung Kidul Jogjakarta. *FONDATIA, 2(2)*, *117*-.

Vol. 9 No. 3 (2024): Edisi Desember 2024
P-ISSN : 2540-816X E-ISSN : 2685-620

Fajarudin, A. A., & Samsudi, A. (2021). Teknik Ice Breaking sebagai Penunjang Semangat dan Konsentrasi Siswa Kelas 1 MI Nurul Islam Jatirejo. Idarotuna. *Journal of Administrative Science*, *2(2)*, *147-*.

Fatah, P. R., Kisai, A. A., Nurkholis, N., & Labudasari. (2023). Model Pembelajaran Problem Based Learning (PBL) Sebagai Peningkatan Hasil Belajar IPAS Pada Siswa Sekolah Dasar. *Paedagogi: Jurnal Kajian Ilmu Pendidikan*, *9(1)*, *106.*

Fatihani, N., Iswandi, I., & H. (2024). Penggunaan Ice Breaking dalam Meningkatkan Motivasi Belajar Peserta Didik pada Pelajaran Tematik Kelas III Madrasah Ibtidaiyah. *Jurnal Basicedu, 8(2)*, *1055*.

Fauzi, M. I. R., & Faradita. (2024). Implementasi Ice Breaking untuk Meningkatkan Konsentrasi Belajar pada Siswa Kelas 3B MI Muhammadiyah 28 Surabaya. *J-SES: Journal of Science, Education and Studies, 3(1).*

Harianja. (2022). Implementasi dan Manfaat Ice Breaking untuk Meningkatkan Minat Belajar Siswa Sekolah Dasar. *Jurnal Basicedu*, *6(1)*, *1324*.

Hartati, S., Fatmawati, L., & Krismilah, T. (2020). Upaya Meningkatkan Minat dan Hasil Belajar Siswa dengan Game Edukatif pada Pembelajaran Tematik Muatan Ipa Kelas V Sd Masjid Syuhada. *Report, Universitas Ahmad Dahlan.*

Hijriati, P. R. (2021).). Proses Belajar Anak Usia 0 Sampai 12 Tahun Berdasarkan Karakteristik Perkembangannya. *Bunayya Jurnal Pendidikan Anak, 7(1)*, *152.*

Inayah, N., & Prayogo, M. S. (2023). Penerapan Media Permainan Spin Roda Berputar untuk Meningkatkan Hasil Belajar Ipa Di Mi Al-Islamiyah Pasuruan Tahun 2022/2023. *Indonesian Journal of Science Learning (IJSL), 4(1)*, *12–1*.

Indarto, & A. (2018). Penggunaan Media Crossword Tournament untuk Meningkatkan Hasil Belajar Siswa Kelas IV SDN Lidah Wetan II Surabaya. *Jurnal PGSD Unesa, 6(2)*, *24–1*.

Juhaeni, J., Wiji, S., Wadud, A. J., Saputra, H., Azizah, I. N., & Safaruddin, S. (2022). Pengaruh Media Pembelajaran Teka Teki Silang terhadap Hasil Belajar IPA Materi Perkembangbiakan Tumbuhan. *Journal of Instructional and Development Researches, 2(6)*, *241-*.

Khoerunisa, T. (2020). Pengaruh Ice Breaking terhadap Motivasi Belajar Siswa pada Mata Pelajaran IPA di Kelas III Sekolah Dasar Islam Terpadu Nuurusshiddiiq Kedawung Cirebon.

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P-ISSN : 2540-816X E-ISSN : 2685-620

EduBase, 1(1), *84–9*.

Lestari, N. C., Hidayah, Y., & Zannah, F. (2023). Penerapan Metode Pembelajaran Permainan Edukatif terhadap Hasil Belajar IPA di SDN Sungai Miai 7 Banjarmasin. *Journal on Education, 5(3)*, *7095*.

Marlinah, M., & Priyanti, N. Y. (n.d.). Upaya Meningkatkan Kemampuan Sosial Emosional Anak melalui Permainan Ular Tangga pada Kelompok B di TK Al Khairiyah Jatibening, Bekasi. *Jurnal Pendidikan Tambusai, 5(20)*, *413*.

Marzatifa, L., Agustina, M., & Inayatillah, I. (2021). Ice Breaking: Implementasi, Manfaat dan Kendalanya untuk Meningkatkan Konsentrasi Belajar Siswa. *Al-Azkiya: Jurnal Ilmiah Pendidikan MI/SD, 6(2)*, *162-*.

Maulida, R. A., & Maslikhah, M. (2022). Pengembangan Metode Pembelajaran E â€"Ice Breaking Terintegrasi dengan Permainan Edukatif pada Pembelajaran IPA. *MODELING: Jurnal Program Studi PGMI, 9(4)*, *220-*.

Mufidah, E., & Lestari, P. D. (2022). Pengembangan Media Game Edukasi untuk Meningkatkan Pemahaman Siswa pada Mata Pelajaran IPA Kelas IV. *IBTIDA', 3(02)*, *186*.

Noviyanti, S., Sari, D. E. P., & Tanti, R. (2022). Implementasi Teknik Ice Breaking pada Pembelajaran Di Sd 64/I Muara Bulian. *Jurnal Pendidikan Dan Konseling (JPDK), 4(3)*, *501-*.

Oviyanti, L. D. (2014). Keefektifan Pembelajaran Kooperatif Tipe Snowball Throwing Bervisi Sets terhadap Hasil Belajar Koloid. *Chemistry in Education, 3(1).*

Sonia, G., Wijayatiningsih, T. D., Mulyadi, D., Ifadah, M., Aimah, S., Budiastuti, R. E., ... & Sriprasert, C. (n.d.). EFL STUDENT'S ENTHUSIASM FOR LEARNING BY GIVING ADVICE MATERIAL THROUGH ICE BREAKER. *In Prosiding Seminar Nasional & Internasional*.

Sugiyono. (2020). *Metodologi Penelitian Kuantitatif, Kualitatif dan R & D*.

Sunarti, D. A. A. (2023). Meningkatkan Kecerdasan Emosional Siswa melalui Permainan Tradisional Ular Tangga pada Pembelajaran IPA Kelas 4 SDN 024 Tarai Bangun. *Journal of Primary Education.*, *6(1)*, *45–5*.

Suniyati, S., Dermawan, H., & Sumantri, I. (2022). Upaya Meningkatkan Minat dan Hasil Belajar Siswa pada Pembelajaran IPA dengan Menggunakan Ice Breaking di Kelas IV SDN Puspasari–Jasinga. *Primer Edukasi Journal, 1(2)*, *38–4*.

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P-ISSN : 2540-816X E-ISSN : 2685-620

Syamsuardi. (2012).). Penggunaan Alat Permainan Edukatif (APE) Di Taman Kanak-Kanak PAUD Polewali Kecamatan Tanete Riattang Barat Kabupaten Bone. *Jurnal Publikasi Pendidikan, 2(1)*, *59–6*.

Ulfa, M., & Nadhif, M. (2022). Peningkatan Hasil Belajar IPA Menggunakan Media Permainan Ular Tangga di Madrasah Ibtidaiyah Al Fattah Kota Malang. *ISPRIS: Islamic Primary School, 1(2)*, *121-*.

Wati, A. (2021). Pengembangan Media Permainan Ular Tangga untuk Meningkatkan Hasil Belajar Siswa Sekolah Dasar. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar, 2(1)*, *68–7*.

Wulandari, R., Susilo, H., & Kuswandi, D. (2017). *Penggunaan multimedia interaktif bermuatan game edukasi untuk meningkatkan aktivitas dan hasil belajar siswa sekolah dasar (Doctoral dissertation, State University of Malang*.

Zakiyyah, D., Suswandari, M., & Khayati, N. (2022). Penerapan Ice Breaking pada Proses Belajar Guna Meningkatkan Motivasi Belajar Siswa Kelas Iv Sd Negeri Sugihan 03. *Journal of Educational Learning and Innovation (ELIa), 2(1)*, *73–8*.