

Enhancing Social-Emotional Learning in Elementary Schools: The 4Rs Strategy (Reading, Writing, Respect, and Resolution)

Rashika Ardafa Sahila¹, Unik Ambarwati², Ika Damayanti³, Edy Mawardi⁴, A.S Almunawwarah⁵

¹ Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; rashikaardaфа.2024@student.uny.ac.id

² Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; unik@uny.ac.id

³ Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; ikadamayanti.2024@student.uny.ac.id

⁴ Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; edymawardi.2024@student.uny.ac.id

⁵ Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; asalmunawwarah.2024@student.uny.ac.id

ARTICLE INFO

Keywords:

Character Development;
4Rs Model;
Social Emotional Learning

Article history:

Received 2024-12-23

Revised 2025-03-06

Accepted 2025-06-11

ABSTRACT

In the context of Industry 4.0, students are increasingly exposed to complex emotional and social challenges that often carry over into the school environment. These evolving dynamics pose a significant challenge for educators, especially when students struggle to identify and manage their emotions. To address this, effective strategies in social emotional learning (SEL) are crucial. This study explores the application of the 4Rs model—Reading, Writing, Respecting, and Resolving—as a framework to enhance students' empathy and emotional self-regulation at SD Muhammadiyah Suronatan, with a focus on identifying both its supporting and inhibiting factors. Using a qualitative case study approach, data were collected through classroom observations, interviews with teachers and students, and analysis of school documentation. This method provided an in-depth understanding of how the 4Rs model supports SEL development in an elementary school setting. The findings demonstrate that the 4Rs model has a meaningful impact on students' social and emotional growth. Reading activities helped students recognize and understand various emotions, while writing tasks encouraged them to express and reflect on their feelings. Respecting, in the form of appreciation activities, strengthened the emotional bond between teachers and students and promoted a more empathetic classroom environment. Finally, resolution activities provided structured opportunities for students to engage in decision-making and conflict resolution. In conclusion, the integration of the 4Rs model has proven effective in promoting empathy and emotional regulation among students. These findings offer valuable insights for other elementary schools seeking to implement SEL strategies that respond to the demands of Industry 4.0.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

A.S Almunawwarah

Universitas Negeri Yogyakarta, Yogyakarta, Indonesia; asalmunawwarah.2024@student.uny.ac.id

1. INTRODUCTION

Social Emotional Learning (SEL) opens up opportunities for students to develop their potential optimally through emotions, which contribute positively. Social emotional learning is a process in which children and adults develop the skills, attitudes, and values needed to achieve social and emotional competence (Indah et al., 2022). In this modern era, learning social emotional skills is one of the key factors that determine a person's success in social life and the world of work. Social emotional intelligence includes the ability to understand, manage, and express emotions in a healthy way, as well as the ability to interact with others positively. Based on this, a form of learning is needed that can encourage the social-emotional development of students, especially in elementary schools.

Social emotional learning also has a great impact on the learning process that teaches self-regulation, self-monitoring, and social skills towards the surrounding environment. Many studies have stated that the existence of a curriculum in social emotional learning can increase prosocial behavior and reduce student aggression (Portnow et al., 2018). Not only that, according to research, there is an influence of social factors on students' academic levels (Corcoran et al., 2018). The two studies that have been conducted have not integrated the 4Rs model for students in Elementary Schools. The relevance of the research is also supported by the results of initial observations at SD Muhammadiyah Suronathan by conducting interviews with teachers and students about the implementation of the 4Rs model

The results found that there was still a lack of implementation of social-emotional learning in schools. Many learning activities only focus on one aspect, namely the cognitive aspect, and ignore other aspects. There are still many students who lack sensitivity, empathy, and conflict skills, who do not manage emotions healthily, and who have responsibility for every decision they make. Teachers at SD Muhammadiyah Suronathan have implemented learning that stimulates social-emotional learning several times, but students do not understand the purpose of the learning. Thus, learning objectives are not achieved, resulting in students' social-emotional understanding not improving.

One approach that has been proven effective in social-emotional development is the 4Rs Learning Model: Reading, Writing, Respect, and Resolution Strategy (Gómez et al., 2023). This model integrates basic literacy skills with interpersonal skills that are essential for building a collaborative and inclusive learning environment. For example, emotions and thoughts are two elements that always go hand in hand in a person's cognitive process. According to Vygotsky, emotions cannot be separated from thoughts, because both are interrelated. This shows that all aspects of life, both internal and external, are interrelated and cannot be separated from each other (Smagorinsky, 2013).

Brown et al. (2010) put forward the 4Rs model emphasizing the development of four main abilities: reading skills, writing skills, respect, and conflict resolution skills. By combining traditional literacy with social-emotional learning (SEL) competencies, this model helps students not only understand and process information, but also communicate effectively, work together in groups, appreciate differences, and resolve conflicts in a constructive manner. In today's world of education, literacy skills are one of the important aspects that cannot be ignored.

Reading and writing are basic skills that are the foundation for the development of knowledge and critical thinking. However, these skills alone are not enough. The ability to respect others and resolve problems or conflicts peacefully are essential life skills in creating a conducive learning environment. Therefore, the 4Rs learning model integrates all these aspects to create a holistic approach. This is in line with research conducted by Nicole, et al who conducted research combining integrated SEL with a literacy curriculum (4Rs), which found greater effects on students' social emotional and academic functioning (Nicole et al., 2023).

By implementing the 4Rs strategy, students are not only equipped with good academic skills, but are also prepared to become individuals who are able to participate actively and positively in the social community. The development of moral values and interpersonal skills through this approach is expected to form a generation that is not only intellectually intelligent, but also has a strong character and is able to face challenges in everyday life. Therefore, in addition to honing intellectual intelligence, comprehensive education must pay great attention to the development of social-emotional intelligence.

This is very important so that students not only excel academically, but are also able to face social challenges wisely and become more adaptive individuals and have a positive impact on community life. The purpose of this study was to determine the implementation of the 4Rs Reading, Writing, Respect, and Resolution Strategy Learning Model at SD Muhammadiyah Suronatan in relation to Social-Emotional Learning at the school. Social-Emotional Learning (SEL) can be integrated with subjects in elementary schools, one of which is the Indonesian Language subject. In the Learning Outcomes (CP) phase A in grade 1 of elementary school, the Independent Curriculum, students show interest and are able to understand and convey messages, express feelings and ideas, participate in simple conversations and discussions in interpersonal interactions and in front of many listeners politely. With this CP, teachers can develop learning materials by teaching about emotional vocabulary, such as happy, sad, angry, and anxious, so that they can express the emotions they feel.

2. METHODS

This study employed a qualitative research method using a case study approach. A case study is a method in which researchers explore a particular phenomenon (or "case") within a defined period and specific setting, such as programs, events, processes, institutions, or social groups. It allows for the collection of detailed and in-depth information through various data collection procedures conducted over time (Sugiyono, 2021).

The subjects of this study included students, as well as Grade I and Grade IV teachers, selected based on their roles as early implementers and facilitators of classroom activities related to children's emotional development. The research was conducted at SD Muhammadiyah Suronatan, a primary school located in Yogyakarta, which served as the object of this case study.

Data were gathered using structured interviews, participant observation, and documentation. The instruments used for interviews, observation, and documentation had been previously validated by lecturers from the Elementary Education Department at Yogyakarta State University (UNY). For data analysis, this study applied the Miles and Huberman model, which involves three steps: data reduction, data display, and conclusion drawing. To ensure the validity of the findings, the research utilized both technical triangulation and source triangulation methods.

3. FINDINGS AND DISCUSSION

The 4Rs model activities at SD Muhammadiyah Suronatan were carried out by teachers and students in the classroom. This study found findings in the implementation of the 4Rs model consisting of Reading, Writing, Respect, and Resolution Strategy Learning. Interviews, observations and documentation were used as data collection techniques that produced research data in Table 1 of the research results. The following are the results of the 4Rs model at SD Muhammadiyah Suronatan.

Table 1. Research Result

4Rs Model	Interview	Observation	Documentation	Findings
1. Reading	Through reading books related to social emotional, students can learn various characters and traits from various figures in the story. Through reading books given	This is shown by students who are able to understand the characteristics of characters		Students read books related to social learning in the school library or in class. Students can recognize various types of emotions

4Rs Model	Interview	Observation	Documentation	Findings
	<p>by teachers, students are able to know various types of emotions in a person. Through reading books related to social emotional, students can learn various forms of social interaction such as cooperation and helping each other.</p>	<p>that influence social interactions in books that have been read and students can also explain how characters reflect social emotional values, how characters face problems and their solutions which are implemented in everyday life.</p>	<p>There are various reading books related to children's social emotions. These reading books are available in libraries and also in classrooms</p>	<p>in the characters through the storyline. Students can learn about social learning through the activities or behaviors carried out by the characters in the story. After that, the teacher helps students to be able to implement various social interactions with friends in the class, for example cooperation and helping each other as well as sensitivity and empathy for fellow friends.</p>
2. Writing	<p>Through writing activities, students have a place to express their emotions and students become accustomed to being open to others regarding what they feel.</p>	<p>Students are able to understand and identify characters. However, students do not write down any social emotional that has been understood, although students are not encouraged to write down the values in the characters they have read, the teacher encourages students to relate to their personal experiences and write according</p>		<p>Students write by connecting social emotional books with everyday life through teacher encouragement, so that from this writing students can express their emotions and become accustomed to being open to others regarding what they feel.</p>

4Rs Model	Interview	Observation	Documentation	Findings
3. Respect	<p>to their experiences.</p> <p>The attention and feedback given by the teacher has a positive impact on the students. The students become smarter in regulating their emotions by trusting the teacher as a place to complain or a place to confide.</p>	<p>Students begin to understand and realize that each individual has a different point of view and opinion and in the form of applause as a form of appreciation for the opinions of friends, students also have empathy for their peers when they experience the problems they are facing.</p>	 <p>Students are able to express their feelings to the teacher by telling stories, coloring the sheet "My Feelings in This World", and writing short notes about their feelings along with feedback given by the teacher through discussions on the students' expressions.</p>	<p>Through the students' expressions to the teacher about their conditions and feelings, it provides evidence that the students have been able to interpret the social emotional books that have been read. The feedback given by the teacher also provides meaning to the students, and provides an example of empathy for others.</p>
4. Resolution Strategy	<p>Learning activities of questions and answers and sharing of feelings carried out by students to teachers. Teachers provide explicit learning on how to resolve conflicts, such as to help. When listening with friends empathy, speaking politely, and finding solutions together.</p>	<p>When friends experience problems, the students to teachers. Teachers provide empathy within explicit learning on students how to resolve conflicts, such as to help. When listening with friends empathy, speaking politely, and finding solutions together.</p> <p>When friends experience problems, the students to teachers. Teachers provide empathy within explicit learning on students how to resolve conflicts, such as to help. When listening with friends empathy, speaking politely, and finding solutions together.</p>	 <p>Students are learning with teachers how to regulate their emotions and how to resolve conflicts with their friends.</p>	<p>By teachers implementing resolution strategies for students on socio-emotional problems they face. Students are able to handle conflicts well between themselves and their friends and can also manage their emotions.</p>

Based on Table 1, the implementation of the 4Rs Reading, Writing, Respect, and Resolution Strategy Learning Model at SD Muhammadiyah Suronatan is as follows:

3.1 Analysis of the Stages of the 4R Strategy Learning Model

3.1.1 Reading

Research revealed that reading activities related to children's social-emotional development have long been implemented by teachers and students in both lower and upper classes at Muhammadiyah Suronatan Elementary School. According to interviews, students are accustomed to reading storybooks both at school and home. Al Farabi, a fifth-grade student, stated, "Yes, I have. I get the books from my parents and the library. They are picture books with characters who have various emotions—some easily angry or sad, while others are kind." Students expressed joy when reading storybooks in the school library. These books feature diverse characters and traits, frequently causing students to become emotionally involved in the storylines. This aligns with Hargreaves' theory, which emphasizes that elementary education should address not only cognitive and psychomotor skills but also student emotions. The reading activity has been integrated into lessons, particularly within Indonesian language instruction. Teachers often engage students in collective reading and explain various character attributes depicted in the stories.

The 4Rs activity significantly influences students, especially those in higher grades. One consistent practice among teachers and students after school involves completing daily journals about their emotions. After class readings, students recount the stories they have read. At home, students fill out daily journals using colors that represent different emotions: yellow for happiness, blue for sadness, red for anger, and brown for tiredness. Students color the journal boxes according to how they feel, as noted by one student: "Once, when we went home, the teacher told us to color boxes representing our feelings. Then, each child was asked about the reasons behind their sadness or anger."

After students finish filling out their daily journals, teachers review them carefully. When students indicate red or brown, teachers approach them or invite them to discuss their feelings privately. Teachers inquire about the reasons for their anger or fatigue. If students openly explain the reasons behind their feelings, teachers provide advice or suggestions. If the issues involve conflicts among classmates, teachers arrange conversations between the students involved and offer guidance toward resolution.

Students recognize teachers' presence as essential for regulating their emotional well-being. This observation is supported by Hamre and Pianta's (2005) research, highlighting that first graders require significant emotional support from teachers for successful academic performance and relationships. Students themselves mentioned feeling reassured when teachers provide guidance and comfort. Similarly, research conducted by Ramdani suggests that teachers capable of creating enjoyable and comforting environments tend to be more popular among students.

Students also appreciate having teachers as trusted confidants. Panayiotou et al. (2019) found that students with stronger social-emotional skills tend to develop closer relationships within their school environment. Students affirmed that their teachers consistently provide extraordinary attention and care, enabling them to comfortably express their emotions.

3.1.2 Writing

After reading social-emotional books, students engage in writing activities to explore and articulate their feelings inspired by these readings. Research conducted at SD Muhammadiyah Suronatan regarding teachers' and students' implementation of the 4Rs model discovered that students, encouraged by their teachers, connected emotions experienced from the stories to their daily lives through expressive writing. These activities enable students to articulate their feelings clearly, fostering openness towards themselves and others. According to Halik et al. (2022), expressive writing techniques effectively help students manage their emotional expression.

Furthermore, findings by Schindler and Bakker (2020) reveal that positive affective behaviors facilitate students in addressing new challenges. At SD Muhammadiyah Suronatan, students' positive affective experiences derived from writing about social-emotional stories positively influence their emotional well-being. Such emotional writing activities also enhance students' openness in interactions with others. Additionally, research by Masyithah (2021) notes that students' writing activities based on group collaboration experiences significantly enhance their social-emotional intelligence.

3.1.3 Respect

Teacher feedback activities related to reading social-emotional books involve discussions where students revisit moral values they have learned from these books. This interactive approach allows students to internalize concepts of moral politeness independently, without repeated direct explanations from teachers. Research findings from SD Muhammadiyah Suronatan demonstrate that such feedback makes students feel cared for and provides opportunities for students to comfortably express and discuss their emotions and personal circumstances. Additionally, this activity motivates students to deeply understand and embrace values such as empathy, tolerance, and respect toward others. According to Koenka et al. (2021), failing to provide adequate feedback negatively affects student motivation. Conversely, proper feedback assists students in empathizing with peers and appreciating differing viewpoints.

Research by Fitriyatinur et al. (2023) indicates that teacher feedback regarding students' emotional conditions effectively nurtures empathy, offering an impactful method for enhancing individual empathetic capabilities. Encouraging empathy through these activities helps diminish aggressive behavior and promotes respect toward peers. At SD Muhammadiyah Suronatan, implementing the 4Rs approach significantly improves students' social-emotional skills, helping them relate to peers, cultivate empathy, develop a sense of solidarity, and value others' opinions. Cultivating social-emotional skills from an early age prepares students to positively engage with and be accepted by society, which values mutual understanding, empathy, and cooperation. Meidina et al. (2018) affirm that these skills substantially contribute to an individual's ability to function harmoniously within society.

3.1.4 Resolution Strategy

Schools, as part of a broader social subsystem, inevitably encounter the potential for conflict, especially among students. Such conflicts can arise from various factors, including differences of opinion, disagreements between friends, or dissatisfaction with established rules. Unfortunately, students often possess limited understanding of conflict, grasping only its superficial aspects without comprehending its core or how to handle it constructively. This inadequate awareness frequently leads to ineffective conflict management strategies. Students may surrender passively, avoid problems entirely, or resort to harmful actions like aggression and revenge. Others might even seek resolution through formal legal methods, which often prove impractical or ineffective in educational settings.

Sadly, these ineffective approaches can adversely impact both involved individuals and the wider school environment, resulting in emotional, social, and even physical harm. Therefore, equipping students with knowledge, skills, and attitudes supportive of positive conflict resolution is essential, enabling them to address issues wisely, fairly, and constructively. Additionally, teachers themselves must cultivate emotional knowledge and skills to foster positive learning environments. For instance, educators abroad have successfully adopted the RULER intervention, a program specifically focused on enhancing emotional intelligence (EI). According to Orr and Lavy (2024), teachers participating in this initiative first undergo professional development designed to equip them to deliver EI-focused curricula effectively, thereby contributing to creating emotionally intelligent schools. Similarly, integrating conflict resolution strategies within school curricula and classroom activities can significantly address this challenge. Implementing these methods in learning models not only deepens students' understanding of conflict but also trains them in practical and constructive management

strategies. This approach helps create a harmonious school environment that actively supports students' social and emotional growth.

Observations and interviews with teachers and students at SD Muhammadiyah Suronatan revealed that interactive learning activities—such as question-and-answer sessions and social-emotional discussions on conflict management—enable students to effectively handle interpersonal conflicts. Students are guided to use constructive approaches, including empathetic listening, respectful communication, and collaborative problem-solving. Berger and Luckmann (2015) highlight the positive impacts of incorporating conflict-resolution strategies into educational practice. Their research shows students exhibit enhanced abilities to identify underlying causes of conflict, evaluate pertinent information critically, and assess conflicts' potential positive and negative outcomes. Additionally, students become more adept at clearly articulating ideas and solutions, and collaborating effectively during conflict resolution. These acquired skills demonstrate the efficacy of conflict-resolution-based educational methods in developing socially and emotionally competent students prepared to face interpersonal challenges constructively. Zieher et al. (2024), referencing Strambler, underscore that children benefit significantly from Social and Emotional Learning (SEL) programs when provided opportunities to practice skills in various contexts. Furthermore, Bronkhorst and Akkerman (2016) assert that fostering strong connections between parents and schools enhances continuity and consistency in children's SEL development.

3.2 Supporting and Inhibiting Factors of the 4Rs Learning

Analysis of the 4Rs learning model, Reading, Writing, Respect, and Resolution Strategy at SD Muhammadiyah Suronatan also produced supporting and inhibiting factors in its implementation. The following is a description of the supporting and inhibiting factors along with solutions in implementing the 4Rs Learning Model at SD Muhammadiyah Suronatan.

3.2.1 Supporting Factors

Research conducted by Setiawati et al. (2023) found that the Cooperative Integrated Reading and Composition (CIRC) learning model effectively increases students' reading interest at SD Negeri Inpres Tambe. Similarly, at SD Muhammadiyah Suronatan, implementing the 4Rs model has also successfully enhanced students' enthusiasm for reading. Additionally, the 4Rs model positively impacts student learning motivation at the school. This aligns with findings by Agung and Yuliawati (2021), which indicate that the Teams Games Tournament (TGT) learning model at SMA Negeri 1 Petang significantly improves students' motivation for learning. Another crucial factor contributing to the successful implementation of the 4Rs model at SD Muhammadiyah Suronatan is a safe and comfortable learning environment. Guerrero and Söström (2024) emphasize that a supportive environment is vital in fostering students' reading habits and literacy skills. Furthermore, Sukma et al. (2024) highlight that collaborative teacher activities—such as discussion, teamwork, and assessment—also positively influence students' engagement in reading.

3.2.2 Inhibiting Factors

In implementing the 4Rs model, two key challenges are apparent: the limited availability of social-emotional books and students' restricted reading abilities. A practical solution to address students' reading skill limitations is the integration of read-aloud activities using children's social-emotional books. According to research conducted by Tati et al. (2022), reading aloud activities significantly improved reading skills among third-grade students at SD Negeri 02 Nanga Jetak during the 2021/2022 academic year. Such activities not only enhance reading proficiency but also allow students to better comprehend the emotional content, develop empathy, and internalize positive social behaviors presented in the stories.

To resolve the shortage of available social-emotional books, teachers and school administrators can initiate open donation campaigns involving parents, community members, and local organizations. Marhayati (2021) highlights that open book donation movements effectively gather high-quality books and foster increased reading interest among students. Additionally, establishing partnerships with local libraries, publishing companies, and non-governmental organizations can help schools consistently access diverse social-emotional reading materials. By actively involving the community in supporting these initiatives, schools can ensure long-term sustainability, providing students consistent opportunities to engage deeply and meaningfully with literature aimed at their emotional and social development.

Furthermore, periodic book drives and reading festivals at school can encourage greater community participation and raise awareness about the importance of social-emotional literacy. Through these combined efforts—implementing structured read-aloud sessions, organizing community donations, and partnering with local stakeholders—schools can create a richer learning environment that supports and nurtures students' social-emotional growth.

3.3 The 4R learning model (Reading, Writing, Respect, and Resolution) at Muhammadiyah Suronatan Elementary School supports Indonesia's national education policy

The findings regarding the application of the 4R learning model (Reading, Writing, Respect, and Resolution) at SD Muhammadiyah Suronatan align strongly with Indonesia's national education policies. This alignment is particularly evident in the context of developing students' character and social-emotional competencies, which are the central focus of both the Merdeka Curriculum and the National Education System Law (Sisdiknas). One primary goal of the Merdeka Curriculum is fostering student profiles that embody the core values of Pancasila, emphasizing crucial social-emotional qualities like empathy, mutual cooperation, and conflict-resolution skills. The Pancasila student profile encompasses various character traits and abilities that students are encouraged to develop (Arpanti et al., 2023). In this context, the 4R model, combining activities of reading, writing, appreciation, and conflict resolution, directly contributes to shaping a robust, socially competent character. By engaging students with social-emotional literature that explores moral values, respects diversity, and promotes conflict resolution, this model nurtures better-prepared individuals who can positively contribute to society.

Moreover, this research supports government initiatives aimed at enhancing character education in elementary schools, a crucial priority within national education goals (Iskandar et al., 2023). The 4R model explicitly fosters positive personal attributes such as mutual respect, empathy, and emotional self-regulation. Activities like maintaining a daily emotion journal, "Rasaku Dina Iki," help students gain greater self-awareness and control over their emotions, thereby supporting their overall emotional and social development.

Furthermore, findings from this study highlight the critical importance of creating a positive and comfortable learning environment to effectively implement educational models. The Merdeka Curriculum stresses that education must address not only cognitive development but also emotional well-being (Evi Natanti et al., 2024). Consequently, the 4R model fulfills the aspirations of national educational policy by establishing inclusive, holistic, and safe educational spaces where students feel free to express themselves, understand emotions, and respect their peers.

In addition, the increasing emphasis within educational policies on character-based and social-emotional approaches underlines the pivotal role teachers play in facilitating students' emotional growth (Susanti et al., 2023). The findings affirm the literature asserting that teachers are indispensable in cultivating students' social and emotional competencies, particularly regarding emotional regulation and empathy. Teachers' active role in providing constructive feedback and emotional guidance significantly supports students' social-emotional growth. Thus, these results resonate strongly with Indonesia's educational policy frameworks, advocating for values-based and emotionally supportive learning practices.

In summary, implementing the 4R learning model at SD Muhammadiyah Suronatan effectively meets the objectives set forth by Indonesian national education policies. These findings underscore that structured approaches emphasizing moral and social-emotional values substantially enhance the Pancasila student profile envisioned in the Merdeka Curriculum. Ultimately, emphasizing character and life skills through this educational model prepares students to become empathetic individuals capable of effectively addressing social challenges, thereby shaping well-rounded, resilient citizens.

4. CONCLUSION

The implementation of the 4R learning model—Reading, Writing, Respect, and Resolution Strategy—at SD Muhammadiyah Suronatan has positively contributed to enhancing students' social-emotional development. Findings from this study indicated substantial improvements in students' abilities to understand, manage, and effectively express emotions, which significantly supports the establishment of healthy social interactions. Students demonstrated increased emotional awareness, empathy, and enhanced interpersonal relationships following the application of the model. Nevertheless, challenges arose during the implementation phase, particularly regarding the limited availability of appropriate social-emotional literature and disparities in students' reading capabilities. These limitations were mitigated through practical interventions, including structured reading-aloud activities and community-supported book donation campaigns. However, a notable limitation of this research is its exclusive focus on student outcomes, without adequately examining the critical role teachers' competencies may play in facilitating and influencing the model's effectiveness. Given that the successful application of the 4Rs strategy inherently depends on teachers' social and emotional engagement, future research should prioritize investigating the influence of teacher competencies and readiness in the implementation of social-emotional learning frameworks. Additionally, future studies might consider longitudinal approaches or cross-contextual comparative analyses to provide deeper insights into optimizing and sustaining the 4R learning model across varied educational contexts.

REFERENCES

Agung, A., & Yuliawati, N. (2021). Penerapan Model Pembelajaran TGT (Teams Games Tournament) untuk Meningkatkan Motivasi Belajar. *Indonesian Journal of Educational Development*, 2(2).

Arpianti, D., Jusmawati, J., Iskandar, A. M., & Supardi, R. (2023). Profil Pelajar Pancasila Berbasis Kurikulum Merdeka untuk Membentuk Karakter Gotong Royong Peserta Didik. *Jurnal Ilmiah Profesi Pendidikan*, 8(4), 2566–2572.

Bronkhorst, L., & Akkerman, S. (2016). At the boundary of school: Continuity and discontinuity in learning across contexts. *Educational Research Review*, 19, 18–35.

Brown, Jones, Larusso, & Aber. (2010). Improving Classroom Quality: Teacher Influences and Experimental Impacts of the 4Rs Program. *Journal of Educational Psychology*, 102(1), 153–167.

Corcoran, R., Cheung, A. C. K., Kim, E., & Xie, C. (2018). Effective universal school-based social and emotional learning programs for improving academic achievement: A systematic review and meta-analysis of 50 years of research. *Educational Research Review*, 25, 56–72.

Evi Natanti, S., Dwijayanti, I., & Kusen. (2024). Analisis Pengaruh Pembelajaran Sosial Emosional (PSE) terhadap Karakteristik Peserta Didik Kelas II di SDN Kalicari 01. *Journal on Education*, 06(04), 19217–19244.

Fitriyatinur, Q., Agustina, M. T., & Amaliyah, S. (2023). Pelatihan Empati Pada Anak Kelas 2 dan 3 SDN Barusari 02 Kota Semarang. *Jurnal Pengabdian Kepada Masyarakat Nusantara (JPkMN)*, 2, 829–835.

Gómez, J. A., Brown, J. L., & Downton, J. T. (2023). High quality implementation of 4Rs + MTP increases classroom emotional support and reduces absenteeism. *Frontiers in Psychology*, 14.

Guerrero, G., & Sjöström, J. (2024). Critical scientific and environmental literacies: a systematic and critical review. *Studies in Science Education*.

Halik, A., Helwa, A., & Ramadhani, A. (2022). Penerapan Teknik Expressive Writing Langkah Membantu Siswa Mengelola Emosi. *SEMANGGI: Jurnal Pengabdian Kepada Masyarakat*, 1(02), 100–105.

Hamre, B. K., & Pianta, R. C. (2005). Can Instructional and Emotional Support in the First-Grade Classroom Make a Difference for Children at Risk of School Failure. *Child Development*, 76(5), 949–965.

Indah, N., Stai, P., Surabaya, Y., Putri, Z., Stai, I., Azis, A., & Al-Ibrohimy Bangkalan, S. (2022). Implementasi Pembelajaran Sosial Emosional Pada Pembelajaran Jarak Jauh. *JOECES Journal of Early Childhood Education Studies* (Vol. 2, Issue 1).

Iskandar, S., Sholihah Rosmana, P., Zulfa Luthfiyyah, R., Amelia, S., Maulidawanti, D., & Nur Fauziyah, N. (2023). Peningkatan Karakter Anak Bangsa Dalam Kurikulum Merdeka Melalui Program Profil Pelajar Pancasila. *INNOVATIVE: Journal Of Social Science Research*, 3, 2729–2742.

Koenka, A. C., Linnenbrink-Garcia, L., Moshontz, H., Atkinson, K. M., Sanchez, C. E., & Cooper, H. (2021). A meta-analysis on the impact of grades and comments on academic motivation and achievement: a case for written feedback. *Educational Psychology*, 41(7), 922–947.

Marhayati, N. (2021). Pendidikan Seks bagi Anak dan Remaja : Perspektif Psikologi Islam. 21(01), 45–61.

Masyithah, M. (2021). Penerapan Teknik Keterampilan Sosial Emosional pada Pembelajaran IPA Materi Bioteknologi dan Produksi Pangan Siswa Kelas IX-1 di SMP Negeri 4 Bolo Tahun Pelajaran 2020/2021. *JagoMIPA: Jurnal Pendidikan Matematika Dan IPA*, 1(2), 135–146.

Meidina, P., Sofia, & Anggraini. (2018). Pengembangan Empati Anak Usia Dini. *FKIP UNILA*.

Nicole, D., John, Jason, & Brown. (2023). Testing the integration of a teacher coaching model and a social-emotional learning and literacy intervention in urban elementary schools. *Teaching and Teacher Education*, 132, 104.

Orr, S., & Lavy, S. (2024). Teaching who you are: Preliminary findings linking teachers' and students' social-emotional skills. *Social and Emotional Learning: Research, Practice, and Policy*, 4, 100062.

Panayiotou, M., Humphrey, N., & Wigelsworth, M. (2019). An empirical basis for linking social and emotional learning to academic performance. *Contemporary Educational Psychology*, 56, 193–204.

Portnow, S., Downer, J., & Brown, J. (2018). Reductions in aggressive behavior within the context of a universal, social emotional learning program: Classroom- and student-level mechanisms. *Journal of School Psychology*, 68, 38–52.

Schindler, M., & Bakker, A. (2020). Affective field during collaborative problem posing and problem solving: a case study. *Educational Studies in Mathematics*, 105(3), 303–324.

Setiawati, A., Muammar, & Anwar Sani, M. (2023). Penerapan Model Pembelajaran Cooperative Integrated Reading And Composition (CIRC) Untuk Meningkatkan Meningkatkan Minat. *SEMESTA: Jurnal Ilmu Pendidikan Dan Pengajaran*, 1(1), 1–9.

Smagorinsky, P. (2013). What Does Vygotsky Provide for the 21st-Century Language Arts Teacher?. *Language Arts*. 192–204.

Sugiyono. (2021). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Bandung: Alphabet.

Sukma, H. H., Sahila, R. A., & Febrilia, Y. (2024). Pedagogical Competence of Elementary School Teachers in Multiliteracy Learning within Independent Curriculum. *PAEDAGOGIA*, 27(1), 38.

Susanti, M., Rahmah, H., & Hikmaturuwaida, H. (2023). Peran Orang Tua dan Guru terhadap Perkembangan Emosional Anak di Madrasah Ibtidaiyyah. *Jurnal Basicedu*, 7(1), 562–571.

Tati, P., Persada, S., Sintang, K., Oktaviani, U. D., Dimas, E., & Riberu, H. (2022). Analisis Kemampuan Membaca Nyaring Melalui Cerita Rakyat Maling Kundang Pada Siswa Kelas III SD Negeri 02 Naga Jetak. *SENSASEDA*, 317–326.

Zieher, A. K., Bailey, C. S., Cipriano, C., McNaboe, T., Smith, K., & Strambler, M. J. (2024). Considering the "How" of SEL: A framework for the pedagogies of social and emotional learning. *Social and Emotional Learning: Research, Practice, and Policy*, 3, 100030.