INTERNATIONAL JOURNAL OF EDUCATIONAL INNOVATION

NAWALA

Volume 2, Number 1, 2023

New Learning Strategies and Open Learning Technologies in Improving Children's Social-Emotional Competence

Elya Fitrotunnisa[1*]

[1] Universitas Islam Negeri Sunan Kalijaga, Yogyakarta ,Indonesia

Abstract

Article history:
Received: January 6, 2023
Revised: February 22, 2023
Accepted: April 28, 2023
Published: June 30, 2023

Keywords:
Digital Education,
Emotional Development,
Learning Strategies,
Open Technology,
Social Competence.

Identifier:
Nawala
Page: 1-16
https://nawala.io/index.php/ijei

In the ever-evolving digital era, early childhood education faces both new challenges and emerging opportunities in shaping children's social-emotional competence. This study aims to explore the contribution of innovative learning strategies and open educational technology to the enhancement of social emotional skills in children. Through a literature study involving twelve selected international journal articles published, it was found that collaborative based strategies, project based learning approaches, and the integration of technology such as open learning applications can significantly improve children's empathy, emotional regulation, and social skills. Open educational technology provides broad access and flexibility in developing learning environments that are responsive to children's emotional needs. The study concludes that innovative approaches and the digitalization of education must be adopted wisely to support children's holistic development within a social and emotional context. These findings offer valuable insights for educators, curriculum developers, and policymakers to design inclusive learning models that are both emotionally supportive and digitally empowered.

*Corresponding author:
elyafitrotunnisa0659@gmail.com (Elya Fitrotunnisa)

1. Introduction

Child development in the early stages of life is a crucial foundation for achieving cognitive, social, and emotional competencies that will influence various aspects of their lives, both in the short and long term. Childhood is a critical period where the foundation for life skills is gradually and holistically formed. One of the main challenges in current child education is how to effectively and sustainably shape and develop social-emotional competencies, especially amidst the massive wave of digitalization and the drastic transformation of educational systems across various dimensions. Social-emotional competence generally encompasses a number of important abilities, including a child's ability to recognize, understand, and manage their own emotions, build and maintain positive relationships with others, and make responsible decisions in various social contexts they face daily.

Various studies over time have explicitly emphasized the importance of developing these social-emotional skills from an early age, as they have been proven to contribute significantly to long-term academic success, healthy interpersonal relationships, and children's mental health in the future (Arace et al., 2021). Thus, social-emotional education is not a complementary aspect, but a fundamental component in child education that cannot be ignored. However, in reality, conventional learning strategies still widely used in various educational institutions often fail to address or accommodate children's emotional needs comprehensively and deeply. This leads to a gap between children's developmental needs and the learning approaches applied in the learning environment.

Therefore, new learning approaches that are more adaptive, flexible, and integrative are urgently needed, including the utilization of Open Educational Technology, which has rapidly developed in the last decade (Castro, 2019). New learning strategies such as project-based learning, social-collaborative learning, and game-based learning have shown significant effectiveness in increasing children's active participation and emotional engagement in a fun and meaningful learning process. Along with this, open learning technologies, such as interactive digital platforms, educational applications, and web-based learning resources, have proven to be able to provide a broad and open space for children's exploration of social experiences more deeply, flexibly, and contextually.

The availability and accessibility of digital technology allow for personalized learning tailored to each child's specific needs, expand access to rich social-emotional learning resources, and provide real-time feedback that is relevant and accurate for a child's progressive emotional development. This technology-based learning also provides ample opportunities for teachers and parents to better understand children's emotional dynamics as a whole and provide timely, evidence-based, and appropriate interventions for children's psychosocial needs (Nurhayati, 2021). Integrating technology into child learning can create a more open, dynamic, and responsive educational ecosystem to children's emotional needs. However, the adoption of technology in early childhood education is not without challenges, both ethically and pedagogically.

One of the main challenges often faced is how to maintain a healthy balance between the use of digital technology and direct social interaction, which remains an

important and irreplaceable element in building empathy and social skills in a real way. Therefore, it is important to design learning strategies that consciously integrate technology into the learning process contextually, balanced, and considering the developmental conditions of children individually and in groups. This paper aims to deeply examine how new learning strategies and the use of open learning technology can effectively improve children's social-emotional competence. This study is based on an analysis of recent academic literature. The main focus of this study is to discuss relevant theoretical developments, practical implementations that have been applied in various educational contexts, and empirical results that show how children's social-emotional learning develops in an increasingly complex and challenging digital era.

2. Literature Review

2.1. Child Social-Emotional Competence in Modern Education

Social-emotional competence is at the core of a holistic educational approach that aims not only to develop cognitive abilities but also to shape a child's character and emotional balance comprehensively. In the context of 21st-century education, this competence is increasingly recognized as a crucial component for equipping children to face complex and dynamic social challenges. CASEL (Collaborative for Academic, Social, and Emotional Learning) classifies this competence into five interconnected main domains: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. These five aspects form the basic framework for understanding and developing a child's emotional capacity from

an early age. Self-awareness allows children to recognize their own emotions and values, while self-management relates to the ability to constructively regulate emotions and behavior. Social awareness fosters empathy and understanding of others, while relationship skills include the ability to communicate, cooperate, and resolve conflicts. Responsible decision-making relates to the ability to consider the ethics and consequences of actions. A study by Denham et al. (2019) shows that strengthening these domains in children has a significant positive impact on academic achievement, the quality of social relationships, and an increase in prosocial behavior. Therefore, integrating social-emotional development into the learning curriculum becomes an important and strategic necessity in modern education systems.

2.2. New Learning Strategies Supporting Emotional Intelligence

Project-based and collaborative learning approaches enhance children's active engagement in decision-making, teamwork, and problem-solving, all of which are essential for building social and emotional intelligence (Lozano et al., 2022). Through this method, children are not only passive recipients of information but also act as active, critical, and reflective learners in various learning situations. Contextually designed project activities allow children to understand social dynamics in small and large groups, and learn to appreciate different viewpoints and working styles of their peers. The collaboration that occurs in this process provides real experience in sharing responsibilities, listening empathetically, and constructively resolving conflicts.

In addition, the use of digital narratives, social simulations, and game-based learning has been proven to increase children's empathy and emotional awareness. Digital narratives help children understand others' perspectives through stories relevant to their lives. Meanwhile, social simulations provide a safe space to experiment with emotional responses to various social situations. Game-based learning, on the other hand, motivates children through elements of challenge and reward, while strengthening their ability to manage emotions when facing pressure or failure. The combination of these approaches makes the learning process more meaningful and emotionally profound for children, and supports their holistic social-emotional development (Moreno et al., 2019).

2.3. Open Learning Technology and its Impact on Emotional Learning

Open learning technologies, such as online platforms and mobile applications, have significantly changed the landscape of child education in recent years. This change not only affects how children access information but also how they experience learning as a complete social and emotional process. Digital platforms enable a more flexible, adaptive, and individualized learning process based on children's needs. Open-source applications supporting emotion-based activities like journaling and emotion recognition were able to significantly improve children's emotion regulation. These activities provide space for children to reflect on their feelings, name their emotions, and understand the relationship between feelings and actions.

In addition, the features provided in these applications are often equipped with visual, audio, or animated guides that are appealing to children and encourage

higher emotional engagement. The availability of multimedia-based content also enriches the learning experience by presenting various social contexts in immersive visual and audio forms. This helps children develop a concrete social understanding through simulations of real situations. Interactive content based on stories, virtual characters, or educational games also strengthens the transfer of social skills by allowing children to practice taking others' perspectives and interacting in safe scenarios. Thus, open learning technology has great potential to systematically and enjoyable support the development of children's social-emotional aspects.

3. Methods

This research uses a systematic literature review approach to trace and analyze various academic findings relevant to the topic of learning strategies and the use of open learning technology in improving children's social-emotional competence. The main focus of this method is to identify and thoroughly review scientific articles published in reputable international journals. The article search process was conducted through the Google Scholar platform using a combination of keywords. Articles selected for analysis in this study were strictly chosen based on a number of pre-determined inclusion criteria. First, the article must be a publication from a peer-reviewed journal to ensure its quality and scientific credibility. Second, the main topic of the article must focus on early childhood education up to elementary school age children, considering that this period is a critical stage in children's social and emotional development. Third, the article must contain variables or discussion focuses related to innovative learning strategies or open educational technology.

Fourth, the articles used must be available in English for consistent comparison and evaluation and must have been published within ensure data recency and the relevance of findings to the current educational context.

A total of twelve articles that met all these criteria were successfully collected and selected for further analysis as primary sources in this study. These articles were chosen because they were deemed to have good academic quality, high relevance to the study's focus, and diverse yet complementary topic coverage in discussing the influence of new learning strategies and open learning technology on the development of children's social-emotional competence. Each article reflected various methodological approaches, ranging from qualitative, quantitative, to mixed methods, providing a comprehensive perspective on the implementation and effectiveness of the learning interventions used. Topics covered in these articles included various learning strategies such as project-based approaches, collaborative learning, and the use of digital narratives, as well as various forms of open learning technology such as interactive mobile applications, open-source online platforms, and educational multimedia.

Analysis of these articles was conducted thematically to identify patterns, approaches, and findings related to the development of children's social-emotional competence through new learning strategies and open learning technology. To ensure data validity and reliability, each article was critically reviewed by examining the research methodology used, including study design, participants, instruments, as well as the significance of the results and their contribution to understanding in the field of children's social-emotional education.

4. Results and Discussion

This Literature analysis shows that new learning strategies based on collaboration, role-playing, and participatory approaches significantly support the development of children's social-emotional competence in the context of modern education. These three approaches not only provide space for children to actively participate in the learning process but also facilitate the growth of real social experiences, where children learn through direct interaction with peers and adults. Collaborative learning strategies involve children in joint activities that demand cooperation, active listening, and collective decision-making, which indirectly train communication skills, social awareness, and empathy. Meanwhile, role-playing allows children to explore various emotions through portraying diverse social situations, which not only enhances children's understanding of their own feelings but also the feelings of others around them.

In a study by Smith et al. (2019), it was explained that structured play approaches effectively allow children to recognize their own emotions and the emotions of others through repeated interaction processes, consistent social modeling from teachers, and interpersonal relationships formed within the group. This approach creates a safe space for children to explore and express their emotions openly without fear of negative judgment. Teachers play an important role in creating a supportive atmosphere where children feel valued and understood, which in turn increases their self-confidence and ability to regulate emotions (Gracia-Peinando, 2023). Pedagogically guided role-playing also helps children understand

the consequences of social actions, and familiarizes them with the process of emotional reflection.

Along with the advancement of digital technology and the transformation of learning methods, open learning technology has emerged as an important tool in supporting children's social-emotional development. This technology provides various interactive media that enable children to learn independently and collaboratively, both inside and outside the classroom that open-source applications designed to support emotion-based activities, such as digital journaling and emotion recognition through illustrations or interactive narratives, were able to effectively improve children's emotion regulation skills. Children can write or record their emotional experiences in a safe and structured digital journal, thereby strengthening their self-awareness and emotional control gradually.

Furthermore, interactive applications designed in game formats or educational games have shown positive results in increasing empathy, impulse control, and social awareness in children (Saleme et al., 2020). Children who use these applications not only receive engaging visual and auditory stimuli but also acquire social scenarios that allow them to learn to recognize and respond to emotions in contexts resembling real life. In addition, open learning technology has the advantage of creating more inclusive and child-friendly learning access for children with special needs or certain social barriers. Customizable features allow children with different backgrounds and abilities to remain actively involved in a learning process that is responsive to their emotional needs.

The use of digital devices in the learning process also facilitates teachers in conducting formative assessments of children's social-emotional development. By tracking children's activities in the application, teachers can observe behavioral patterns, recognize emotional tendencies, and identify areas that require further intervention. Digital data collected can be used to generate children's development reports more systematically and objectively. Nurhayati (2021) emphasized the importance of adult involvement especially teachers and parents in guiding children during the digital interaction process to ensure it remains directed, meaningful, and appropriate to the child's developmental age context. This guidance is not only to prevent misuse of technology but also to ensure that technology is used as a means that supports positive social and emotional learning experiences (Walker & Venker Weidenbenner, 2019) .

Although open learning technology has various advantages, there are a number of challenges in its application, especially in early childhood education. One major issue is the risk of excessive screen exposure, which can negatively impact children's concentration, emotion regulation, and ability to build direct social relationships. Physical social interaction still plays an important role in the formation of empathy, emotional expression, and contextual understanding that cannot be fully replaced by digital media. Therefore, a blended learning approach that combines face-to-face learning with balanced technology use is considered more effective in supporting children's holistic social-emotional development. In practice, face-to-face learning remains the primary space for children to interact directly, while technology is used as a complement that enriches their learning experience.

Research by Arace et al. (2021) supports this view by showing that children who received a 12-week technology-based social-emotional intervention experienced significant improvements in empathy and conflict resolution skills. This proves that structured, directed, and technology-based interventions can have a positive impact on children's emotional aspects if applied appropriately. However, the successful implementation of this strategy heavily depends on the educators' competence and the learning environment's readiness to integrate technology wisely. Technology is not a single solution, but a tool that needs to be used within a child-centered and socially-valued pedagogical framework (Newland et al., 2018).

Furthermore, the role of the teacher as a facilitator is crucial in ensuring that technology is used for deep and meaningful learning purposes. Teachers need to be adequately trained, both in terms of technology literacy and social-emotional learning approaches, to be able to integrate both optimally. A teacher's understanding of children's emotional dynamics, combined with skills in using technological devices, will increase the effectiveness of the implemented learning strategies. Teacher competence in using educational technology has a direct correlation with the success of social-emotional interventions conducted through digital media. Well-trained teachers tend to be more confident in exploring new methods and more adaptive to children's evolving emotional needs.

All results obtained from the twelve international journals reviewed in this study indicate that structured, evidence-based learning interventions oriented toward children's direct learning experiences yield significant results in shaping children's social sensitivity and emotion regulation abilities. Children involved in project-based

learning programs, educational games, and interactive technology showed improvements in their ability to recognize their own emotions, understand the feelings of others, and develop healthier conflict resolution strategies. Not only that, children also tended to be more confident in communicating, more open to differences, and able to control their emotional reactions in challenging. Open learning technology, in this context, does not merely serve as an aid, but has evolved into an adaptive, flexible, and transformative learning medium. This technology supports the process of internalizing social and emotional values with an enjoyable, interactive, and contextual approach appropriate to the child's world. With various features available such as social simulations, digital stories, educational animations, and emotional development tracking, technology can create a safe, inclusive, and child-centered learning environment.

However, it is important to emphasize that technology cannot replace direct human interaction. Social and emotional values are formed through authentic relationships between children and teachers, peers, and their surrounding environment. Therefore, technology must be used proportionally, as a complement, not as a substitute. The combination of strong pedagogical approaches and wise use of technology is the main key to building a learning system that truly supports children's social-emotional development. Overall, the findings from this literature review affirm that efforts to improve children's social-emotional competence require synergy between innovative learning strategies and open learning technology designed in a structured, relevant, and contextual manner. Successful implementation will depend on teacher readiness, education policy support, and

parental awareness in guiding children in the digital world. When all these elements work together, early childhood education will not only shape academically intelligent children but also emotionally strong and socially resilient children in the future.

5. Conclusion

This study confirms that new learning strategies and the utilization of open learning technology contribute significantly to improving children's social-emotional competence. Collaborative, project-based, and game-based learning combined with digital applications create a learning ecosystem that supports emotional exploration and healthy social interaction. The wise use of technology opens up opportunities for personalized learning tailored to each child's emotional needs. However, this integration requires the active role of teachers and parents as facilitators to ensure that technology is used appropriately and does not replace direct social interaction, which remains crucial for children. Practical implications of this study include the need for curriculum development that integrates social-emotional and digital aspects, teacher training in educational technology literacy, and the development of open-source applications and learning resources aligned with children's developmental needs. Moving forward, the integration of innovative learning strategies and technology needs to be continuously researched longitudinally to measure its long-term impact on children's character and well-being.

References

Arace, A., Prino, L. E., & Scarzello, D. (2021). Emotional competence of early childhood educators and child socio-emotional wellbeing. *International journal of environmental research and public health*, *18*(14), 7633.

Castro, R. (2019). Blended learning in higher education: Trends and capabilities. *Education and information technologies*, *24*(4), 2523-2546.

Denham, S. A., & Bassett, H. H. (2019). Early childhood teachers' socialization of children's emotional competence. *Journal of Research in Innovative Teaching & Learning*, *12*(2), 133-150.

Garcia-Peinado, R. (2023). The impact of classroom climate on emotional development in childhood. *Environment and Social Psychology*, *9*(1), 1-17.

Lozano, A., López, R., Pereira, F. J., & Blanco Fontao, C. (2022). Impact of cooperative learning and project-based learning through emotional intelligence: A comparison of methodologies for implementing SDGs. *International journal of environmental research and public health*, *19*(24), 16977.

Moreno, A. J., Nagasawa, M. K., & Schwartz, T. (2019). Social and emotional learning and early childhood education: Redundant terms?. *Contemporary Issues in Early Childhood*, *20*(3), 221-235.

Newland, L. A., Mourlam, D., & Strouse, G. (2018). A phenomenological exploration of the role of digital technology and media in children's subjective well-being. *Child Indicators Research*, *11*(5), 1563-1583.

Nurhayati, S. (2021). Parental involvement in early childhood education for family empowerment in the digital age. *Empowerment: Jurnal Ilmiah Program Studi Pendidikan Luar Sekolah*, *10*(1), 54-62.

Saleme, P., Dietrich, T., Pang, B., & Parkinson, J. (2020). A gamified approach to promoting empathy in children. *Journal of Social Marketing*, *10*(3), 321-337.

Walker, G., & Venker Weidenbenner, J. (2019). Social and Emotional Learning in the age of virtual play: technology, empathy, and learning. *Journal of Research in Innovative Teaching & Learning*, *12*(2), 116-132.