

# Contextual Learning with Malay Cultural Content: Developing Social Skills in Preschool Children

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## ABSTRACT

Malay culture-based contextual learning is a meaningful learning experience in supporting children's social development. This study aims to determine the effectiveness of Malay culture-based contextual learning in improving social skills. The method used is a quasi-experimental design with a two-group pretest-posttest control group design. The population of this study were children aged 5-6 years in Rumbai District, Pekanbaru City. The research sample used purposive sampling consisting of 50 children from two institutions, namely Dayyinah Kids Kindergarten and Asri Kindergarten. The results showed that the average value of the experimental class was from 58.44% to 75.80%. Malay culture-based contextual learning in the experimental class was better than the control class without treatment where the average value was 57.88% to 61.12%. The results of the hypothesis test stated that Malay culture-based contextual learning through interactive media had a significant effect on children's social skills, seen from the Sig. (2-tailed) value for the results of the experimental class and control class hypotheses were  $0.000 < 0.05$ . Thus, the hypothesis  $H_0$  is rejected and  $H_a$  is accepted, so it can be concluded that contextual learning based on Malay culture has a positive effect on the social skills of children aged 5-6 years.

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## 1. INTRODUCTION

Social skills are a fundamental aspect of a child's holistic development, influencing not only interpersonal relationships but also long-term academic and emotional outcomes. Social competence in early childhood manifested through behaviors such as cooperation, empathy, sharing, and effective communication is closely related to the learning environment and pedagogical approaches implemented during the early years (Chen et al, 2024). Ozerk (2021) states that social skills enable children to make

friends, collaborate, cooperate, learn, build harmonious relationships with others, and reduce conflict. Larsson & Bergman (2023) emphasize the importance of social skills training programs to help children interact more easily with peers, resolve conflicts, and build positive friendships. Recent studies emphasize that contextual learning an approach that connects learning materials to real-life and culturally relevant contexts can play a crucial role in developing these competencies (Yuliati et al., 2021). Within this framework, the integration of local cultural values and practices is gaining increasing attention as a way to make learning more meaningful, engaging, and identity-affirming for young children (Rahman et al., 2022). Social skills for young children in the 21st century are becoming increasingly important. important in context education. Skills social Which covering ability interact with person other, communicate in a way effective, Work The same, and control emotion, play role important in child development to face the increasingly developing digital era and complex (Nakamura & Fujimoto 2024).

The above studies demonstrate the importance of developing children's social skills through various learning programs. Teachers should have the right strategies to improve children's social skills by creating meaningful learning processes that integrate social and emotional learning into daily routines (Khayankij, 2024). Wang & Zhang (2024) showed that implementing a contextual learning model in early childhood education can significantly improve the social skills of early childhood. In the study, a learning approach that links material to children's daily experiences can encourage the development of social interactions, cooperation, and empathy through group activities, role-playing, and discussions based on local contexts. The results of the study confirmed that a meaningful and contextual learning environment plays an important role in developing social skills from an early age. Furthermore, Sakti et al (2024) shows that the integration of local cultural values through a contextual approach teaching and Learning significantly strengthens the social character of early childhood. Values such as mutual cooperation, respect for parents, and good manners are taught through meaningful activities that reflect the child's cultural context. This is reinforced by Fatmawati et al (2024) who emphasized the importance of the role of culture in contextual learning is to revitalize local wisdom as a means of shaping children's social attitudes. They found that children more easily absorb social values when learning takes place in a cultural context familiar to their daily lives.

Culture-based learning not only transfers culture but also serves as a process to develop understanding of the material being studied by children, particularly in developing social skills. In the Malay cultural context, values such as mutual respect, cooperation, and humility are traditionally embedded in daily social interactions, folklore, songs, and traditional games. These elements not only serve as a means of cultural transmission but also contain implicit lessons that foster social and emotional development (Kermani & Potts 2024). The application of culture not only enriches students' understanding of regional culture but also strengthens their identity, character, and love for their ancestral heritage. Through cultural integration, learning becomes more relevant to students' environment, can increase interest in learning, and shape a cultured and competitive generation in the global era (Sinthya et al., 2014). Despite their potential, these cultural assets are often underutilized in early childhood curricula, especially in urban and digital learning environments. Furthermore, the influence of globalization and standardized curricula have contributed to the decline of local wisdom in preschool education, particularly in areas such as Pekanbaru, Indonesia, where traditional Malay heritage is at risk of being overlooked by more dominant cultural narratives (Fitri et al, 2023).

Based on these issues, there is a growing need to revitalize local cultural knowledge through pedagogical innovation, particularly by integrating it into digital learning platforms that align with children's contemporary media habits. Several recent studies have explored digital-based cultural interventions for older students, such as ethnoscience and ethnomathematics learning modules, which have shown promising impacts on cognitive and affective outcomes (Ristanto et al., 2022; Halim et al., 2023). However, few studies have systematically examined the impact of interactive digital media containing local cultural content on preschoolers' social skills, using rigorous quantitative methods. To address this research gap, this study investigates the effectiveness of contextual learning incorporating

Malay cultural content delivered through interactive digital media in improving preschoolers' social skills.

Beyond its cultural relevance, contextual learning supported by interactive digital media aligns with the characteristics of early learners in today's digital age. Preschoolers are naturally curious, visually oriented, and highly responsive to multimodal stimuli. The use of interactive digital tools such as animated stories, games, and culturally themed apps has been shown to enhance engagement and understanding in early learning environments (Chen & Lee 2024). When these tools are intentionally designed to reflect local cultural elements, they can create rich and meaningful learning experiences that simultaneously foster cultural appreciation and socio-emotional growth. Furthermore, interactive digital media allows for iterative and individual-paced learning, which is particularly beneficial for reinforcing positive social behaviors such as turn-taking, empathy, and cooperative interactions among young children. Therefore, integrating Malay cultural content into a contextual learning framework supported by digital media is not only pedagogically sound but also developmentally appropriate and culturally sustainable.

## 2. METHOD

The research method used in this study was a quantitative quasi-experimental design with a non-equivalent control group design (Sugiyono, 2019), which is considered appropriate for testing the effectiveness of interventions in the context of early childhood education. This design allows researchers to compare the impact of Malay culture-based contextual learning between the experimental and control groups, although participant allocation was not random. The research was conducted in several main stages, starting with problem identification and determining the research design, followed by the development of learning tools and validated social skills observation instruments. The next stage was a pretest to determine the students' initial abilities, followed by a four-week intervention in the experimental group using Malay culture-based interactive digital media containing songs, games, folktales, and cultural values of Riau Malay culture. Meanwhile, the control group followed conventional learning without local cultural elements. After the intervention, a posttest was conducted to measure the development of children's social skills, specifically on indicators of cooperation, communication, and empathy. Data were analyzed using paired sample t-tests and independent sample t-tests with a significance level of 0.05, which indicated a significant difference between the two groups. Thus, this approach is effective for measuring the impact of culture-based learning interventions on early childhood social skills (Larsson & Bergman, 2023).

## 3. FINDINGS AND DISCUSSION

The results of the study indicated a significant improvement in the social skills of preschool children who participated in contextual learning using digital media embedded with Malay cultural content. The experimental group showed a marked increase in their post-test scores ( $M = 75.80$ ,  $SD = 4.91$ ) compared to their pre-test scores ( $M = 58.44$ ,  $SD = 5.63$ ), with a paired sample t-test revealing a highly significant difference ( $t = 13.73$ ,  $p < 0.001$ ). In contrast, the control group also experienced a slight improvement (pre-test  $M = 57.88$ , post-test  $M = 61.12$ ), but the increase was considerably smaller ( $t = 3.42$ ,  $p = 0.002$ ). An independent sample t-test comparing the post-test scores between the experimental and control groups showed a statistically significant difference ( $t = 9.87$ ,  $p < 0.001$ ), confirming that the contextual approach incorporating local cultural elements was more effective in enhancing children's social skills, particularly in areas of cooperation, empathy, and communication.

**Table 1.** Mean and Standard Deviation of Pre-test and Post-test Social Skills Scores

Group	N	Pre-test Mean (SD)	Post-test Mean (SD)	t-value	p-value
Experimental	25	58.44 (5.63)	75.80 (4.91)	13.73	< 0.001
Control	25	57.88 (5.88)	61.12 (6.01)	3.42	0.002

**Table 2.** Independent Sample t-test: Post-test Comparison Between Groups

Variable	Group	Mean	SD	t-value	p-value
Social Skills Score	Experimental	75.80	4.91	9.87	< 0.001
	Control	61.12	6.01		

Based on the data analysis presented in table 1, there was a significant difference between the average social skills scores before and after treatment in both experimental and control groups. In the experimental group, there was a significant increase in the average score, from 58.44 (SD = 5.63) in the pre-test to 75.80 (SD = 4.91) in the post-test. The paired-samples t-test showed a t-value of 13.73 with a significance level of  $p < 0.001$ , indicating a highly statistically significant increase. Meanwhile, the control group also showed an increase, but not as significant as the experimental group. The average score increased from 57.88 (SD = 5.88) in the pre-test to 61.12 (SD = 6.01) in the post-test, with a t-value of 3.42 and  $p = 0.002$ , indicating a moderate but still significant increase. Furthermore, Table 2 shows the results of an independent sample t-test comparing the post-test scores between the experimental and control groups. The experimental group obtained a significantly higher mean post-test score ( $M = 75.80$ ,  $SD = 4.91$ ) compared to the control group ( $M = 61.12$ ,  $SD = 6.01$ ), with a t-value of 9.87 and  $p < 0.001$ . This finding confirms that contextual learning that integrates Malay cultural content is significantly more effective in improving preschoolers' social skills compared to conventional teaching methods.

These findings align with Vygotsky's sociocultural theory, which emphasizes that children's cognitive and social development is shaped through meaningful social interactions and the use of cultural tools (Fleer, 2022). In this context, Malay cultural content acts as a mediating tool that encourages children to interact, share, and participate in activities that have cultural and social significance. When children are introduced to traditional games and local stories, they are exposed not only to the learning content but also to the social values embedded in those cultural practices, which in turn strengthens their social skills.

The results of this study also support the culturally responsive pedagogy approach proposed by Ladson-Billings (2021), who stated that the learning process is more effective when learning materials are relevant to the learners' experiences and cultural backgrounds. When children see their culture reflected in learning content, this not only increases engagement but also strengthens their self-identity and sense of belonging to their community. This aligns with research by Zhang et al. (2023), who found that digital learning media integrating local culture significantly improved emotional regulation and social interaction in preschoolers in multicultural environments.

From a learning theoretical framework, these results support the contextual learning theory (CTL) developed by Berns and Erickson, which states that the learning process is more effective when learners are able to connect material to everyday life and personal experiences (Rahman & Yulianti, 2023). When learning touches on children's real-life contexts, especially those that are culturally relevant, their participation, motivation, and social engagement significantly increase. Contextual learning enables children to understand the meaning of social behaviors such as helping each other, respecting each other, and cooperating, which are practiced through collaborative cultural games and interactive dialogue.

Furthermore, these results are consistent with Ausubel's theory of meaningful learning, which states that new information is more easily understood and remembered when linked to students' prior knowledge (Kurniawan et al., 2022). In this case, children's prior knowledge of Malay culture, encountered in everyday life, serves as a bridge to understanding the social messages instilled through learning activities. Therefore, the use of cultural context serves not only as a strategy for preserving local values but also as an effective approach to building social skills, which are an important foundation in early childhood education.

#### 4. CONCLUSION

The results of this study indicate that Malay culture-based contextual learning through the use of interactive media has a significant positive effect on improving the social skills of children aged 5–6 years in Pekanbaru city. This is indicated by the results of the difference in the average value of social skills between the experimental class and the control class, where the experimental class experienced an increase from 58.44% to 75.80%, while the control class only increased from 57.88% to 61.12%. The hypothesis test produced a Sig. (2-tailed) value of  $0.000 < 0.05$ , which means there is a significant difference between the group that received the treatment and the group that did not. Thus, the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted, which confirms that Malay culture-based contextual learning is effective in improving children's social skills. Although the results of the study that have been obtained indicate the effectiveness of Malay culture-based contextual learning, this study still has several limitations. The focus of the study is only limited to one problem formulation with a quantitative approach, so it has not been able to describe in depth the process of internalizing social values in children. Furthermore, the sample was only drawn from two institutions in the Rumbai area of Pekanbaru City, so the generalizability of the results is still limited. Therefore, further research is recommended to use a mixed methods approach to gain a more comprehensive understanding of the impact of culture-based contextual learning on children's social skills, as well as expanding the scope and variety of educational institutions as research locations to ensure more representative results.

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