

Effects of Group Process-Based Instruction Through Paper Toys Making on Enhancing Holistic Learning of Fourth Grade Students

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Abstract

Holistic development helps elementary school students develop their full potential by focusing on formulating them to grow into complete human beings in all aspects and can adapt to various situations and develop lifelong learning. This research aims to study the results of teaching and learning using group process through paper toy making to promote holistic learning of primary school students in grade 4. The sample group consisted of 16 primary school students in grade 4 who were selected by purposive sampling. The instruments used consisted of 1) a holistic learning assessment form and 2) a satisfaction assessment form. The statistics used are the descriptive statistics. The results of the research found that 1) the holistic learning of students after learning was significantly higher than before learning at a level of 0.05 and 2) the satisfaction of students after learning by organising learning using group processes through paper toy making was at the highest level, indicating that the results of teaching and learning using group processes through paper toy making on promoting holistic learning development of primary school students in grade 4.

Keywords: group process-based instruction, paper toys making, holistic learning, elementary student

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Introduction

Current studies emphasise the holistic development of learners as a foundation that promotes learners to learn and develop their potential to the fullest. The effective process of potential development must be continuous and comprehensive. The ultimate goal is to help each individual discover and fully utilise their abilities, taking into account individual differences. Holistic development of learners must promote learners in various aspects: physical, such as having good physical skills; mental, such as appropriate emotional management, self-control, understanding their mental state, and appropriate expression; social, such as practicing social skills, teamwork, and having a role that is appropriate for oneself; and intellectual, such as learning to live happily, developing oneself through education, improving oneself according to one's needs, continuous learning, and careful reflection before making decisions (Chanprasit, 2023). In addition, Mahmudulhassan et al. (2024) stated that effective primary education should emphasise the holistic development of learners because students at this level are in a period of continuous development and change. Therefore, development should be continuous to be appropriate for their age and should develop in all dimensions: physical, mental, emotional, social, and intellectual, integrated with the context of students' lives. Both in terms of economics, society, culture, politics and the environment of the family, community and society (Sawasphon, 2020), the learning management process that is consistent with the holistic development of learners is active learning, which is an important tool in developing the education system to keep up with social changes. It not only adds value to the learning process but also promotes skills in attitude, problem-solving and the ability to work with others by using various tools such as self-assessment, mind maps and peer assessment (Phuwanna et al., 2023), which occurs through group processes that promote social skills and cooperation, giving students the opportunity to practice thinking, communicating, solving problems and making decisions together. It is consistent with the concept of participative learning that emphasises the real role of students in the learning process. Therefore, organising a learning process that is suitable for elementary school students should emphasise participation, group work and hands-on practice to promote social skills, creativity and collaborative learning. It is consistent with the Basic Education Core Curriculum B.E. 2551, which states that after completing elementary school, students should understand the work process and be able to develop every step, have management skills, teamwork, and be systematic and creative. And have good working habits such as diligence, patience, responsibility, honesty and work etiquette. Which primary education that emphasises group processes can promote the development of students' essential skills? Comprehensive learning in physical, emotional, social and intellectual aspects (Komala et al., 2024). The use of paper toys as a learning medium has a meaning to life and is an important part of culture. It helps stimulate interest and motivation and promotes effective learning processes (Jarrett et al., 2020). Wilson (2021) pointed out that making paper toys is an interesting and valuable activity. Because it can stimulate students' thinking processes, intentions and emotional expressions very well. Allowing primary school students to grow with potential by developing in all three elements of humanity: thinking, feeling and willing at the same time. Promote adaptability and lay a foundation for lifelong learning. For all these reasons, the research team is interested in studying group-focused learning management through paper toy-making activities. To promote holistic learning in grade 4 primary school students with the aim of filling the academic gap and presenting a learning management approach that promotes all-round development of learners. It is expected that the results of this research will lead to the effective development of the quality of primary education.

Objective of Study

This research aimed to study the effects of group process-based instruction through paper toy making on promoting holistic development among fourth-grade students.

Methodology

The sample group consisted of 16 fourth grade students from a school in Phuket Province, selected by purposive sampling. The statistics used were the descriptive statistics. The research instruments were 1) a holistic learning assessment form, consisting of 3 dimensions: thinking, feeling, and willingness, and 2) a satisfaction assessment form, consisting of 5 items. The assessment used a scale with the following scoring levels: 4 is the highest, 3 is moderate, 2 is low, and 1 is the lowest. The interpretation of the average score of appropriateness is as follows: Average score ≥ 3.20 is the highest; Average score between 2.40 - 3.19 is moderate; Average score between 1.60 - 2.39 is low; Average score < 1.60 is the lowest.

Group Process-Based Instruction Through Paper Toy Making

The teacher divides students into groups of good, medium, moderate and weak. Then, students brainstorm, exchange ideas and reflect within the group. Students are assigned roles to help each other within the group. Then, each group jointly designs and creates paper toys using various learning resources, such as books, searching the Internet, and asking knowledgeable friends. The teacher controls the time for 20 minutes. Every student in the group receives one paper toy. Then, each group takes turns sharing knowledge with friends from other groups.

Conclusion

1. Results of the Holistic Learning in Table 1

Table 1

The Comparison Score of the Holistic Learning Scores Before and After Learning

Holistic Learning	N	Score	test	\bar{X}	S.D.	t - test
3-dimensional	16	48	Pre-test	33.19	5.40	8.90*
			Post-test	44.88	1.58	

* Significant level .05

Based on the above Table 1, The result was shown that effects of group process-based instruction through paper toy making had overall the holistic learning (thinking, feeling, and willing) before and after that were significantly different at the 0.05 level, with the average score after studying (mean = 33.19, S.D. = 5.40) being higher than before studying (mean = 44.88, S.D. = 1.58).

2. The Satisfaction of Students After Learning by Organizing Learning Using Group Processes Through Making Toys

Table 2

The Student's Satisfaction After Learning With Group Process-Based Instruction Through Paper Toy Making

Item	M	S.D.
I enjoyed learning this subject.	4.9	0.34
I enjoyed learning this subject.	4.9	0.25
I felt fully involved in the group work.	4.9	0.34
I planned the toy-making activity.	4.3	0.48
I applied the knowledge I gained from this activity to my daily life.	4.9	0.25
I expressed my opinions more.	4.6	0.51
I felt proud of my work and the group's work.	4.7	0.48
Overall	4.7	0.38

Based on the above Table 2, The satisfaction of students after learning by organizing learning using group processes through making toys from paper was at the highest level (mean = 4.7, S.D. = 0.38), indicating that the results of organizing learning using group processes through making toys from paper promote the development of holistic learning for Grade 4 students. The results of the research found that group learning management with paper toy making can effectively promote students' holistic development. By integrating design, collaboration, and reflection, it creates a learning environment that stimulates meaningful and enjoyable learning. These results are consistent with previous research that supports participatory and hands-on learning in primary school. Student satisfaction also demonstrates the potential of this approach to create quality learning experiences and can be applied in other learning contexts in the future. Therefore, group learning management through paper toy making is effective in promoting holistic learning, which is consistent with the concepts of Miller (2007) and Komala et al. (2024) who indicated that holistic development requires processes that integrate intelligence, emotion, and attitude. In addition, using paper toy making activities in groups helps to enhance cooperation among students, promote social skills, and help learners be more motivated to learn, which is consistent with the results of the studies of Fauzi et al. (2023) and Wilson (2021) who emphasized the importance of hands-on learning in primary school.

References

- Chanprasit, S. (2023). The development of teachers' instructional competence through the PLC process and active learning instruction. *Journal of Educational Administration*, 17(2), 54–67.
- Fauzi, I., Chano, J., Komariah, M., Philrizki, S. I., & Salim, H. (2023). Paper airplane toys: Interpreting children's thinking. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 8(1), 224-242. <https://doi.org/10.25217/ji.v8i1.3198>
- Jarrett, O. S., Bulunuz, M., Jarrett, R. B., & Bulunuz, N. (2020). Teaching with toys: Scientific inquiry through play. E-journal The American Association for the Child's Right to Play (IPAUSA). <http://www.ipausa.org/>
- Komala, I., Wahyudin, A., & Nugraha, A. (2024). Impact of arts education on holistic development: A case study of elementary students at SD Melong Mandiri 4, Cimahi. *Jurnal Belaindika: Pembelajaran dan Inovasi Pendidikan*, 6(3), 216-223. <https://doi.org/10.52005/belaindika.v6i3.195>
- Mahmudhassan, M., Abuzar, M., Riazul, S. M., Rahman, O., & E-sor, A. (2024). Strategies for forming student discipline in Islamic elementary schools Malaysia: A holistic approach in character education. *Solo Universal Journal of Islamic Education and Multiculturalism*, 2(3), 207-218. <https://doi.org/10.61455/sujjem.v2i03.204>
- Miller, R. (2007). *What is holistic education?* Foundation for Educational Renewal. <http://www.holisticedinitiative.org/what-is-holistic-education>
- Phuwanna, B., Supakasorn, B., & Phuwanna, R. (2023). Active learning management: Inspiring and enhancing learners' skills in the instructional process. *Journal of Borwon Integrated Education and Human Sciences*, 4(2), 216–228.
- Poowanna, B., Supakesorn, B., & Poowanna, R. (2023). Empowering learning through active learning: Inspiring and enhancing learner skills in the teaching-learning process. *Journal of bovoron multi-education and human social sciences*, 4(2), 216–227. https://so03.tcihaijo.org/index.php/job_ehs/article/view/271319
- Sawasphon, U. (2020). Group Learning Process for Gambling Awareness among Children and Youth in Thai-Cambodian Border Communities. *Journal of Liberal Arts, Ubon Ratchathani University*, 16(2), 128–149. https://so03.tcithaijo.org/index.php/jla_ubu/article/view/246393
- Wilson, K. (2021). Creative thinking in classroom activities. *Creativity Research Journal*, 33(1), 78-92.

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