

Research Article

Collaborative Learning for Early Childhood Education

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Abstract.

If starting school at the age of seven was considered sufficient in the past, many parents now start their children at the age of toddlers. As a result, the teacher's role is critical because it serves as a substitute for parents. Preschool teachers must be able to monitor children's growth and development in addition to teaching because it affects their future. Parents and teachers must pay adequate attention and affection, educate, guide, and set a good example. Students collaborate in groups to achieve the common goal of each idea through collaborative learning. This aligns with the skills required in the 21st century, namely the 4Cs (creative thinking, critical thinking and problem-solving, communication, and collaboration). The research method employs descriptive qualitative research to describe early childhood teachers' perceptions of collaborative learning's current implementation. The participants in the study were 23 teachers who had implemented collaborative learning.

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1. INTRODUCTION

Early childhood education is becoming more popular. Changes in the learning paradigm are determined by technological developments, social conditions, and societal demands. Parents and teachers must pay adequate attention and affection, educate, guide, and set a good example (Damsy, Y. J., & Rivaei, W, 2014). Parental support, discipline, teacher professionalism, and exemplary behavior all play a role in the development of children's personalities (Wahyuni, I. W., & Putra, A. A, 2020).

PAUD students are part of the alpha generation, which was born after 2010. Because they began school at a young age, this generation is the most educated (Ramadlani & Wibisono, 2017). Because of the ease with which information can be obtained, the generation born in the midst of sophisticated technological developments is known as the alpha generation. Of course, the teacher must be able to adjust the learning process.

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Teachers must anticipate changes in education at the level of digitization, virtualization, gamification of teaching, and content level in response to the character of the alpha generation (Juki & Kojo, 2021). Every child will have ideas and broad insights as a member of a generation that is familiar with technology and information. Because students will collaborate in problem solving, their ideas can be channeled through collaborative learning. Furthermore, students will learn to value each other's ideas and receive appropriate guidance from the teacher. Students collaborate in groups to achieve the common goal of each idea through collaborative learning (Koesnandar, 2021).

This is consistent with the skills required in the twenty-first century, namely the 4Cs (creative thinking, critical thinking and problem solving, communication and collaboration) (Ningsih & Jha, 2021). However, until now, these four abilities have not been fully implemented in educational institutions, particularly pre-schools. Teachers frequently stop teaching at the c1 (understanding) to c3 (applying) ability level. Meanwhile, the alpha generation, which differs from other generations, must have these abilities from a young age. Based on their characteristics, this generation must be capable of interacting collaboratively. Early childhood education has less direct interaction with peers, which is now directly related to technology. Children are taught to respect and make friends with their peers through collaborative learning. Apriani et al. (2020) found that online games have a negative impact on social interactions, such as being more aggressive and having low social intelligence and self-regulation. Learner-centered learning is an alternative to collaborative learning (Susanti et al., 2017). The advantages of collaborative learning for teachers include changing roles from expositor to facilitator and making it easier for teachers to identify interventions for problems in collaborative learning (Mahsus & Latipah, 2021). Individuals in various differences can benefit from collaborative learning. Because humans are created with various differences and have their own distinct characteristics (Wu & Zhang, 2020). Based on this, a survey was conducted to ascertain Early Childhood Education teachers' attitudes toward collaborative learning in early childhood. The research subjects were recruited from one of the early childhood institutions, PAUD Modern Al-Rifa'ie, because the institution had previously conducted and practiced collaborative learning training.

2. METHOD

The research method used was mixed method or a combined method between qualitative and quantitative methods. This method combined two qualitative and quantitative

research methods in a research activity so that more comprehensive, valid, reliable, and objective data will be obtained (Sugiyono, 2016). The mixed method research design used was The Explanatory Sequential Design. The purpose of collecting qualitative data in the first stage was to explore existing phenomena first, then continued with quantitative data collection to explain the relationship of variables found in qualitative data (Creswell, 2011). The chart of this design is presented as follows.

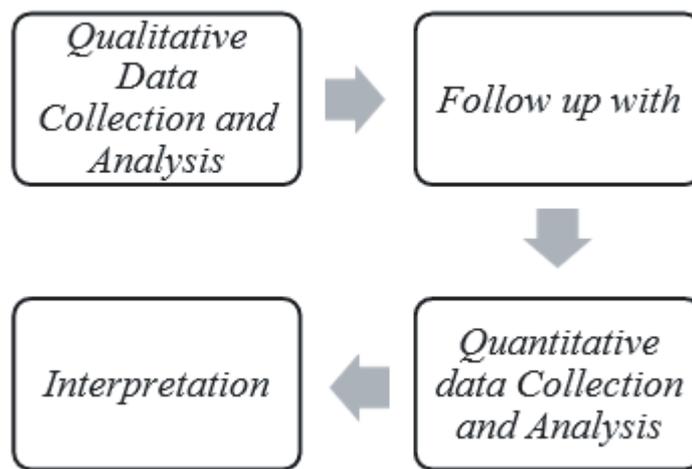


Figure 1: The Explanatory Sequential Design Sumber : Creswell & Clark, 2011.

The research steps are as follows:

Qualitative data collection and analysis At this stage, qualitative data collection is carried out to respondents through interviews. Interviews were conducted by all respondents in order to obtain accurate results. The interview guidelines can be seen in table 1.

TABLE 1: Interview guidelines for data collection.

No	Theme	Questions
1	Collaborative learning process	What is the collaborative learning process that you have done?
2	Teacher creativity	Do you become more creative and innovative when implementing collaborative learning?
3	Advantages of collaborative learning	What do you think are the advantages of collaborative learning in early childhood?
7	Obstacles of collaborative learning	What do you think are the disadvantages of collaborative learning in early childhood?

Follow up

The next stage is to follow up on the results of the previous research. researchers identify problems in the field then develop instruments to find quantitative data to find deeper phenomena.

Quantitative data collection and analysis

At this stage researchers collected quantitative data from distributing questionnaires to all respondents totaling 21 early childhood teachers at Al-Rifa'ie Modern PAUD institutions because they had conducted collaborative learning training and practiced it in their previous schools. After the data is collected, the results of the research on teacher perceptions of the implementation of collaborative learning at the early childhood level are analyzed.

Interpretation

The data that has been analyzed is then interpreted in accordance with the research objectives.

3. FINDINGS AND DISCUSSION

In accordance with the steps of the explanatory Sequential Design, the following results were obtained:

1. Qualitative Data Collection and Analysis

This stage is carried out using the interview method to find out the teacher's explanation related to how the implementation of collaborative learning has been carried out, whether the teacher becomes more creative and innovative by implementing collaborative learning, according to the respondent what are the advantages of implementing collaborative learning in early childhood education, and what are the disadvantages of collaborative learning.

Based on the results of the interviews, it shows that some teachers have implemented collaborative learning through activities to make water transportation themed projects, students work together to make cages from legos, make castles together from blocks, make houses using puzzles and learn using loose parts.

Teachers who have implemented collaborative learning admit that they become more creative and innovative because teachers have to look for and find new ideas in learning that have never even been applied before, teachers have to prepare a variety of tools and materials, teachers must be able to present problems that can be explored, must be able to provide interesting lessons for students. In addition, collaborative learning is not only creative teachers but also students because they must be able to develop their own ideas to solve problems.

The advantages of collaborative learning according to the teacher's perception are

1. Train students' cognitive, creativity and emotional skills.

2. Increase self-confidence
3. Increase students' interest talents
4. Open to any contributing ideas during the learning process
5. Promote ideas and opinions expression
6. Promote initiative, cooperation, critical and creative thinking, independence and interaction
7. Promote active engagement in learning

As for the shortcomings of collaborative learning are as follows

1. Time-consuming and energy-consuming during the preparation
2. The teacher must be able to convey the problems that must be solved precisely and clearly because if students do not understand collaborative learning becomes ineffective.
3. It takes a long time to achieve the desired results

1. **Follow up**

After obtaining qualitative research results, the next step is to browse various references to determine the next survey. The references traced are opinions about the abilities of students after implementing collaborative learning.

1. **Quantitative data Collection and Analysis**

From the quantitative data that has been collected through observation instruments from 21 respondents related to whether or not the respondents have implemented collaborative learning in their class. The data results show 42.9% have never implemented collaborative learning, 14.3% of respondents are undecided whether they have implemented collaborative learning before, 42.9% and 42.9% have implemented collaborative learning.

The second survey related to collaborative learning can prepare for the next level has obtained the results in Figure 2. A number of 47.6% of people answered agree and 52.4% answered strongly agree.

The following data are related to respondents' perceptions of students' ability to cooperate following the implementation of collaborative learning; 38.1 percent were agree and 61.9 percent strongly were agree. It is possible to conclude that collaborative learning can improve students' cooperation skills.

The following data result is a survey on the perception of collaborative learning, which can help students improve their ability to communicate ideas. Based on the data,

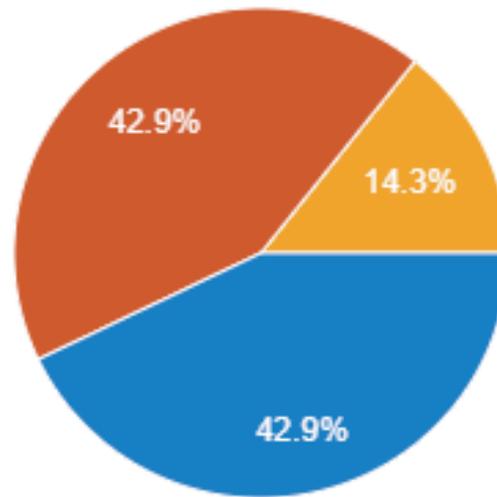


Figure 2: Survey of experience implementing collaborative learning.

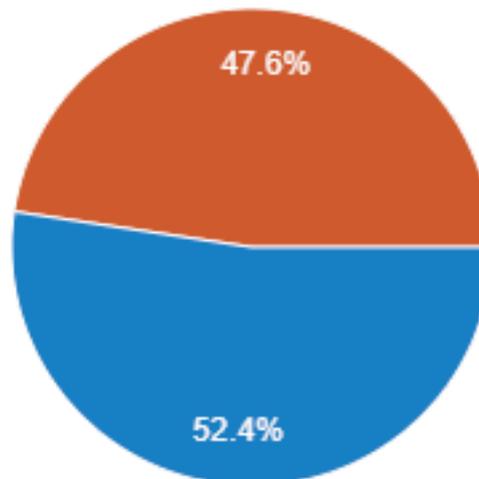


Figure 3: Perceptions of readiness for the next level with collaborative learning.

a number of 9.5% subjects disagreed, 4.8% subjects disagreed, 42.9% subjects agreed and 42.9% subjects strongly agreed. Some respondents disagree with the ability to convey ideas independently because, when done in groups, students tend to mimic other students' responses. As a result, the teacher's role is required to hone their learning independence through challenges from problem solving.

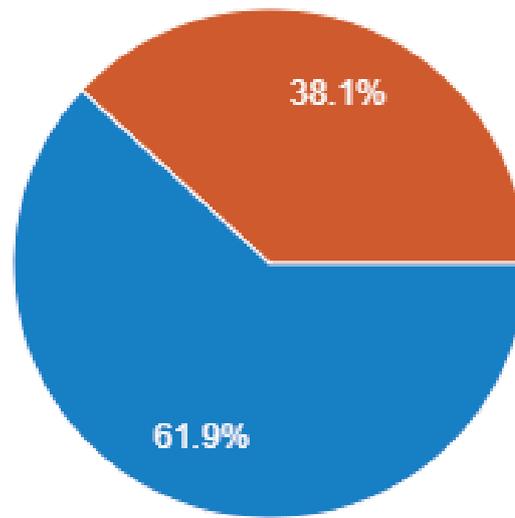


Figure 4: Perception of the ability to work together with collaborative learning.

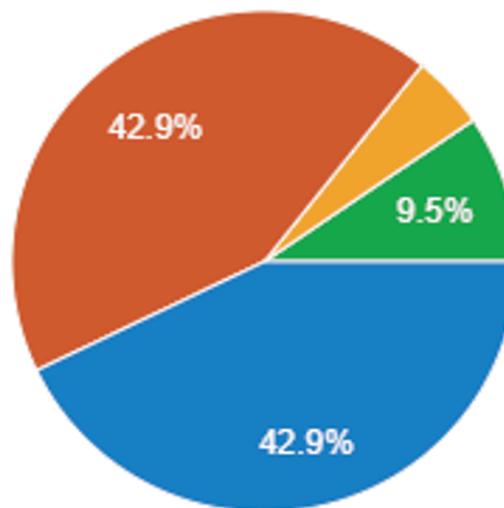


Figure 5: Perception of the ability to convey ideas independently.

According to additional data, a number of 4.8% subjects were disagree, 4.8% subjects were disagree, 57.1% subjects were agree, and 33.3% subjects were agree that collaborative learning can improve creative and innovative thinking skills. This demonstrates that the majority of respondents concur.

1. interpretation

Data analysis results show that collaborative learning is well suited for use in early childhood education. The ability to collaborate, communicate ideas independently, and think creatively and innovatively are all skills that can be developed. However, the

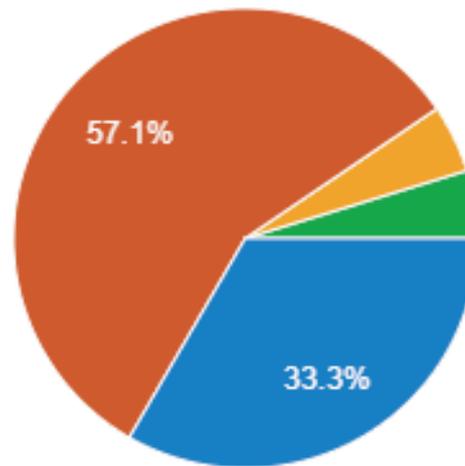


Figure 6: Survey of creative and innovative thinking skills with collaborative learning.

teacher is crucial in the implementation of this collaborative learning. Early childhood children who still require guidance must be directed to the appropriate method of problem solving. It will be ineffective if the teacher does not correctly identify the learning problem. Because not all students at an early age have independent learning, it is more appropriate to use the guided group method in sharpening the ability to convey ideas independently. Teachers must be able to assess their students' learning styles and backgrounds.

4. CONCLUSION

Teachers' perspectives on collaborative learning are well suited to use in early childhood education. This is due to the fact that it can improve cooperation skills, communicate ideas, and think creatively and innovatively. However, implementing this method is difficult; if the teacher is not qualified, collaborative learning becomes ineffective. What teachers must focus on are the problems that students must solve, the delivery of clear and precise learning activities, and group guidance. Of course, the problem selected by the teacher must be tailored to the students' characteristics, the environment, and their learning style.

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