

Analysis of early childhood education teacher preparedness in implementing the Merdeka Curriculum

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Abstract: Early childhood education (ECED) plays an important role in forming the basis of children's intellectual, emotional, and social development in the early stages of their lives. In Indonesia, one of the important initiatives in improving the quality of education is the Merdeka Curriculum. This curriculum aims to give teachers the freedom to develop innovative and relevant learning methods. Malang City, as one of the education centers in Indonesia, has also adopted the Merdeka Curriculum in an effort to improve the quality of early childhood education. However, the successful implementation of the Merdeka Curriculum largely depends on the extent to which ECD teachers understand, plan, and implement learning in accordance with the demands of the curriculum. Therefore, educational researchers and practitioners need to conduct an in-depth analysis related to the readiness of ECD teachers to face this curriculum change. This study used a survey research method through questionnaires given to 158 teachers from 70 RA schools in Malang city. The survey results were then analyzed using descriptive statistical methods. Based on the indicators in this study, researchers found that 88% of teachers are already ready for lesson planning. 81% of teachers already have readiness in learning implementation, and 74.1% are capable or have readiness to evaluate learning in the Merdeka Curriculum. Teachers understand the Merdeka curriculum but in implementation or conducting assessments that are not in accordance with the nomenclature of the Merdeka Curriculum, especially for Early Childhood Education Institutions (PAUD). So, there needs to be a Joint Effort between various parties to increase teachers' understanding of the curriculum, obtain support for the integration of values in learning relevant training, and introduce holistic assessment methods.

Keywords: Teacher Preparations; Early Childhood Education; Independent Curriculum

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INTRODUCTION

Early Childhood Education (ECCE) plays an important role in forming the basis of children's intellectual, emotional, and social development in the early stages of their lives. In the era of globalization and information technology advances, an education system's success In Indonesia, one of the important initiatives in improving the quality of education is that the government has introduced the Merdeka Curriculum as an innovation to support learning that is more based on local wisdom and the cultivation of social values, including concern for the environ-

ment. Another goal is to give teachers flexibility in developing innovative and relevant learning methods.

Malang City, as one of the centers of education in Indonesia, also adopted the Merdeka Curriculum in an effort to improve the quality of ECCE education. The Decree (SK) of the Head of the Education Standard, Curriculum and Assessment Agency (BSKAP) Number 044/H/KR/2022, signed on 12 July 2022, states that more than 140 thousand education units will implement or use the independent curriculum in the 2022/2023 school year (Badan Standar Kurikulum dan Asesmen Pendidikan Kementerian Pendidikan Kebudayaan Riset dan Teknologi, 2023). However, the successful implementation of the Independent Curriculum depends largely on the extent to which ECCE teachers understand, plan, and implement learning in accordance with the demands of the curriculum. Jalal (1970), teacher readiness is very important in preparing learners to learn. This teacher readiness is the most important thing, considering that the teacher influences students' success in the learning process. Therefore, researchers and education practitioners need to conduct an in-depth analysis related to the readiness of ECCE teachers to face this curriculum change.

Several previous studies have highlighted issues related to curriculum implementation in the context of ECCE education. According to Elizah et al. (2022), teachers' lack of understanding of the new curriculum can be a serious obstacle to achieving the desired educational goals. Similar findings were also revealed by Pixyoriza et al. (2023), who found that factors such as lack of training, limited resources, and resistance to change are challenges in adopting new curricula.

Seeing the complexity of this problem, this study aims to conduct an in-depth analysis of the readiness of ECCE teachers to implement learning based on the Independent Curriculum in Malang City. Taking into account conceptual frameworks adapted from current learning theories, this study will delve deeper into the challenges and opportunities faced by ECCE teachers, as well as the factors that influence ECCE teacher readiness. This research is expected to significantly contribute to our understanding of curriculum implementation at the early childhood education level. The results of this study are expected not only to provide a clearer view of the readiness of ECCE teachers in Malang City but also to identify strategies for improving the implementation of the Independent Curriculum at the ECCE level so as to provide policy recommendations and best practices for education stakeholders, to ensure that early childhood education in Malang City is on the right trajectory towards a better future.

Although the Merdeka Curriculum promises an innovative and inclusive learning approach (Rahmawati et al., 2023), the experience of ECCE teachers in implementing this curriculum can create complex challenges. Several factors, such as teachers' understanding of the new curriculum, their readiness to face change, and the support they receive from educational institutions and local governments, have a direct impact on the effectiveness of ECCE learning implementation (Fussalam & Elmiati, 2018).

Various studies show that teacher readiness is one of the key factors that influence the success of curriculum implementation (Munthe, 2020). What's more, it has a significant impact on learning effectiveness. According to research by Brown et al. (2005), teacher readiness includes a deep understanding of the adopted curriculum's structure and objectives and their ability to integrate curriculum values into daily learning (Rouf & Lufita, 2018). Husain et al. (2023) argue that teachers who feel confident and understand the curriculum implemented tend to create a positive learning environment. In addition, research by Anindya and Lokita (2023) emphasizes the importance of continuous training and support for teachers to improve

their skills in designing and implementing learning that is in accordance with curriculum demands (Deák et al., 2021; Zulkifli et al., 2022).

The Merdeka Curriculum provides opportunities for ECCE teachers to explore the creative potential of children (Lestarinigrum, 2022). However, to achieve this goal, ECCE teachers need to have careful preparation and a deep understanding of the implementation of the Independent Curriculum (Jelatu et al., 2018; Nilsook et al., 2021; Xu et al., 2023). There have not been many studies examining the specific readiness of ECCE teachers in implementing the Independent Curriculum. Therefore, this study aims to explore the extent of readiness of ECCE teachers in implementing Curriculum Merdeka-based learning in Malang City. By understanding the challenges and potentials faced by teachers it can provide deeper insights for educational institutions and local governments in supporting ECCE teachers towards implementing learning that is more effective and relevant to children's needs and current curriculum demands (Musa et al., 2022; Suriawati & Mundilarto, 2019).

In this article, we will discuss the results of in-depth research on the readiness of ECCE teachers in Malang City to implement the Independent Curriculum. An in-depth analysis of ECCE teachers' challenges, successes, and needs will be outlined to produce concrete recommendations to improve the quality of ECCE learning in Malang City. It is hoped that the findings in this study will not only make a theoretical contribution to the educational literature but also provide practical guidance for educational institutions and policymakers in supporting the readiness of ECCE teachers to face the demands of a new and innovative curriculum.

METHODS

This study used survey research methods to collect data from Early Childhood Education (PAUD) teachers in Malang City to evaluate their readiness to implement learning based on the Independent Curriculum. Surveys are a suitable research method to measure respondents' views, perceptions, and attitudes related to the research topic (Ramdhan, 2021). The survey design will produce quantitative data that can be analyzed to get a comprehensive picture of the readiness of ECCE teachers in implementing Curriculum Merdeka-based learning.

The sample was determined using a simple random sampling technique. Based on Issac Michael's table with a side error of 5% (Putri & Mursyidah, 2022), a sample of 158 teachers from 70 RA schools in Malang City was obtained. Data collection techniques used questionnaire instruments given to teachers and interviews with several key informants (Seventika et al., 2018). The key informants in this study were several school principals.

In this study, the data obtained came from primary data sources and secondary data sources. Primary data sources are data sources obtained directly from the field (Kuncara, 2014). The primary data sources of this study include questionnaires, interviews, and observations, where questionnaires will be conducted to several kindergarten/RA teachers in Malang City or Regency. While secondary data sources are data sources obtained indirectly from informants in the field (Safa'ah & Sofira, 2019). This secondary data source is in the form of documents and interviews conducted with the heads of IGTK and IGRA in Malang.

The participants of the study were ECCE teachers who taught in selected ECCE institutions in Malang City. The number of participants was determined based on the purposive sampling method to reach data saturation points, where the data obtained was sufficient to answer the research question (Herdiawanto & Hamdayama, 2021). Out of a total of 200 Early Childhood Education (PAUD) teachers in Malang City, 158 teachers (8.3%) participated in this study.

The survey instrument is designed based on related literature and contains structured questions (Hermawan & Amirullah, 2016) covering aspects of teacher readiness in implementing

the Independent Curriculum. Variables in this study include teacher readiness in planning, implementing, and evaluating learning. Further in the instrument, it includes teachers' understanding of the Independent Curriculum, integration of environmental values in learning, teaching skills, administrative and institutional support, training received, assessment of student learning outcomes, and obstacles they face. The instrument was tested for validity and reliability before being used in this study (Creswell, 2014). Data collection begins with initial contact with ECCE institutions and teachers willing to participate. The survey will be distributed to ECCE teachers through online or paper forms, depending on respondents' preferences. The survey will include a brief explanation of the purpose of the study and their expectations of cooperation in filling out the survey. Teachers will be given adequate time to complete the survey according to their busy schedule.

Teacher readiness indicators consist of (1) lesson planning, (2) implementation of learning, and (3) evaluation of learning. Data analysis was carried out qualitatively and quantitatively. The data collected were analyzed in steps: (1) review all data obtained from data sources, (2) categorize and classify data according to research problems (Sunuyeko et al., 2016); (3) reduction and codification of data for further abstraction and meaning, and (4) make conclusions about the results of the analysis. The data obtained is then processed using a formula (Heryahya et al., 2022).

$$P = (\text{score obtained} / \text{maximum score}) \times 100$$

The category and classification of data processing results refer to the categorization according to Seventika et al. (2018), as shown in Table 1.

Table 1. Data Processing Results Category

Average Score	Criterion
$75\% \leq P < 100\%$	Good
$60\% \leq P < 75\%$	Enough
$0\% \leq P < 60\%$	Low

The survey data will be analyzed using descriptive statistical methods, such as frequency, mean, and percentage (Prihatiningsih, 2022), to identify patterns and trends in ECCE teachers' responses. This analysis will help identify common patterns in the outlook and readiness of ECCE teachers related to the Independent Curriculum. Using this survey method, this study is expected to provide a comprehensive picture of the readiness of ECCE teachers in implementing the Independent Curriculum in Malang City. In-depth data analysis from the survey will help identify critical areas that require attention and provide a basis for concrete recommendations to improve the quality of learning at the ECCE level.

RESULTS AND DISCUSSION

This research explores Early Childhood Education (PAUD) teachers' readiness to implement the Independent Curriculum in Malang City. The results highlight many challenges ECCE teachers face in understanding the curriculum, integrating values in learning, institutional support, training, and methods of assessment and evaluation of learning, which are summarized into planning, implementing, and evaluating learning.

When discussing planning, several things must be considered, namely, understanding, training, teaching modules, and preparation of the media to be used. The survey results found that teachers' understanding of the Merdeka curriculum was good, reaching 81.5%, while only 18.5% of teachers did not fully understand the Merdeka curriculum. The understanding referred

to here is the ability to plan what is needed in learning. Some things that are understood related to the independent curriculum are that most of them are able to create modules that are used as learning references. About 70% of teachers are able to compile teaching modules for the Independent Curriculum, but 30% say they are still at the learning stage to make teaching modules in accordance with the rules of the Independent Curriculum. This can be seen in Figure 1.

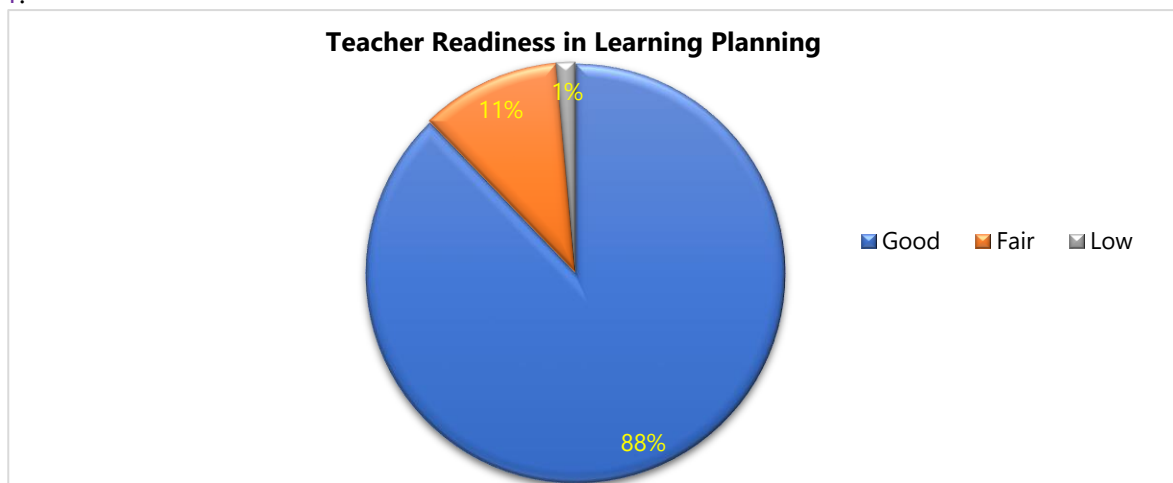


Figure 1. Teacher Readiness in Learning Planning

From the planning indicators above, researchers found that 88% of teachers who were respondents already had readiness in lesson planning, while 11% were quite ready, and 1% were low or said not ready in preparing lesson planning. The difficulties faced are not understanding the Merdeka curriculum, difficulties in determining topics, finding materials for learning, preparing APE or media, preparing play areas and differentiated learning tools; inadequate school infrastructure; and teacher quality and innovation that are lacking in designing learning or activities in the Independent Curriculum. The results showed that the majority of Early Childhood Education (PAUD) teachers in Malang City have a fairly good understanding of the Independent Curriculum. A study by [Ananda and Fadhilaturrahmi \(2018\)](#) shows that teachers' understanding of the curriculum implemented is the key to learning success. This is in line with the findings of another study ([Farhana, 2022](#)), which emphasizes the importance of teachers' conceptual understanding of the concepts and objectives of the curriculum as a success factor in implementing the independent curriculum approach. This understanding is an important foundation in designing learning that is responsive to the needs of students and the surrounding environment. Teachers who have a deep understanding are able to better integrate these curriculum principles into daily learning ([Asdlori, 2023](#)).

In understanding how to implement curriculum, teachers need to have certain readiness and competence. This understanding is obtained not necessarily through reading alone but also by attending training related to the Independent Curriculum. The results showed that almost all teachers, namely 92.6%, had attended training, while only 7.4% had not attended training. The results showed that most PAUD teachers in Malang City had a fairly good understanding of the Independent Curriculum through the following training. This understanding correlated positively with teacher participation in training related to the Independent Curriculum ($r = 0.45, p < 0.05$). Teachers' understanding of the Independent Curriculum is the main foundation for the successful implementation of this curriculum. In this study, most ECCE teachers already have a basic understanding of the principles of the curriculum. However, there

are still some teachers who need a deeper understanding. This indicates the need for increased training and support from relevant institutions.

Furthermore, the researcher analyzed the readiness of teachers to implement learning in the Independent Curriculum. Teacher readiness in implementation consists of initial, core, and closing activities. Questions asked to teachers are related to how to start learning activities, how teacher strategies (learning models) are used in learning, the relationship of previous knowledge with the material to be learned, active student involvement in each learning activity, and the readiness of teaching media used to support the implementation of the independent curriculum. Based on learning implementation indicators, researchers found that 81% of teachers already have readiness in the implementation of learning, while 15% are quite ready but constrained by the learning model used, and as many as 4% are declared low or said not ready to carry out learning. Various difficulties faced are teacher innovation in carrying out learning, the application of unstructured loose-part media, and the application of traditional learning strategies and models that do not use rules in accordance with the Independent Curriculum. This can be seen in Figure 2.

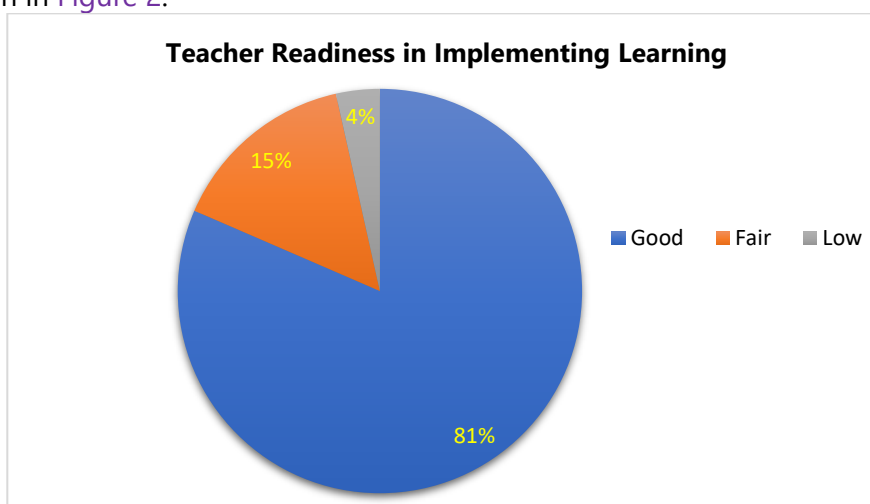


Figure 2. Teacher Readiness In Implementing Learning

Based on the survey results, 96.3% of teachers have perceived and asked open-ended questions at the beginning of the activity when starting learning with the help of other learning resources. This means that before the start of learning, the teacher has asked questions related to the material and related previous knowledge (perception) to the learning theme to be delivered.

In the core activities, the strategies, approaches, models, or even learning methods used by teachers in the implementation of learning according to the survey results are varied. Some of the learning strategies used include expository learning, inquiry learning, problem-based learning (PBL), project-based learning (PjBL), *cooperative learning*, affective learning, and contextual learning. However, a widely used learning strategy is project-based learning (PjBL), where this learning involves students actively. According to the survey results, 96.3% of teachers have involved their students in every learning activity.

The learning approaches used by several schools in Malang are the scientific approach, STEAM, character-based, literacy-based, and interest-based; some even use the Montessori approach. In the learning model, there are several that are used, including centers, groups with safety, or *circle time*, and some use the corner learning model. The majority use a group learning model, wherein one class of students is divided into several groups (3 groups). Each group will be presented with different activities by the teacher. In one meeting, children were asked

to be able to complete two to three activities in the group alternately. If, in one group, there are children who have successfully completed their activities faster than their friends. Then, the child may move to another group to do other activities as long as there is a place for him in the other group in question. If there is no place, children can play in a certain place that the teacher has prepared. That place is meant for safety activities (Nurhayati, 2023).

Learning in early childhood is certainly followed by various learning methods such as observation, question and answer, storytelling, role-playing, singing, demonstration, and experimentation. In addition, it certainly requires media that is used as a bridge in the delivery of learning. Teachers can provide tools or games that are varied and adapted to the theme/subtheme discussed. Learning media or teaching media prepared by teachers must be safe for children. It is also recommended that the media and props used are real objects. Based on the survey, 88% of teachers have been able to prepare teaching media supporting the implementation of the Independent Curriculum. Some others are still not optimal in preparing teaching media. This happens due to limited media or materials for making media related to learning themes.

Loose parts are one of the more frequently used media. The loose part is loose media that utilizes materials in the surrounding environment that are easy to find (Mulyati & Watini, 2022). The use of loose-part media varies, meaning that the material can be moved, carried, combined, redesigned, armed, and reunited in various ways (Yuliasri & Faruq, 2022). In addition to media such as loose parts, teachers use Educational Game Tools (APE) as teaching media to children; of course, APE is designed safely and is able to support aspects of child development. Not only that, nature-based, technology-based media and media derived from surrounding objects are also used as learning media.

The stages that have been carried out previously, such as planning then, implementation, and the last is evaluation. Evaluation is an assessment obtained by means of tests or non-tests using several existing instruments (Dewi & Dailami, 2020). At the evaluation stage, which is carried out to process the results of each learning delivered, both from the tasks of students obtained from groups and independently, attitudes and all activities carried out at school can be seen as the results of the evaluation stage (Febriana, 2019). Evaluation of teacher readiness in implementing the independent curriculum includes the preparation of assessment formats and types of assessments, grading each activity, *recalling*, conducting evaluations, and providing information for tomorrow's activities.

Although almost all teachers are recalling, based on the survey results, 14% of teachers still conduct assessments that are not in accordance with the Curriculum Merdeka assessment format. The new types of assessment in the Independent Curriculum, namely formative assessments, summative assessments, and photo series, are only applied by 26% of teachers. The rest still use types of assessments such as checklists, rating scales, performances, anecdotes, and works or portfolios. Teachers assess by photographing or videoing as a form of observation during learning. In addition, the teachers also conducted workshops to reflect, evaluate, and discuss the follow-up that will be carried out.

The results of the analysis of teacher readiness in evaluating learning were obtained by 74.1% who were able and had the readiness to compile the latest assessment format in accordance with the provisions in the Independent Curriculum. Meanwhile, 2.7% of teachers are quite ready but still have difficulty in preparing assessment instruments, and 3.2% have not been able to compile assessment formats in accordance with the standards of the Independent Curriculum. This can be seen in Figure 3.

The findings point to the need to develop innovative, portfolio-based assessment methods in the context of assessment and evaluation of learning outcomes. Teachers who have used

this approach find it effective, but its spread is still limited. This is because some educators understand the independent curriculum completely, and some understand some of its provisions. Institutional support in this regard is key, and special training is needed to introduce this method to ECCE teachers.

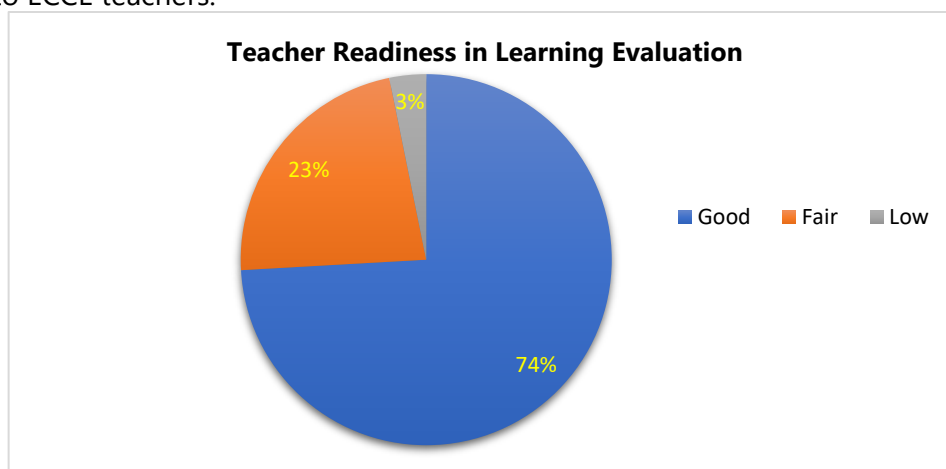


Figure 3. Teacher Readiness In Learning Evaluation

Innovative, portfolio-based assessment methods play an important role in measuring student achievement and understanding their progress. The study by Resya (2023) shows that holistic assessment is key to comprehensively understanding student progress. However, the study found that portfolio-based valuation methods have not been widely applied. Therefore, there is a need for special training to introduce this method to ECCE teachers and support its implementation in daily practice.

The results of this study show that teacher readiness has not been said to be good. This can be seen from teachers who understand the Merdeka curriculum but implement or conduct assessments that are not in accordance with the nomenclature of the Independent Curriculum, especially for Early Childhood Education Institutions (PAUD). So, there needs to be a Joint Effort between various parties to increase teacher understanding of the curriculum, obtain support for integrating values in learning relevant training, and introduce it so that they will be better prepared to implement the Independent Curriculum by creating a stimulating learning environment.

CONCLUSION

This research highlights a number of challenges faced by Early Childhood Education (ECCE) teachers with respect to understanding the curriculum, integration of values in learning, institutional support, training, and methods of assessment and evaluation of learning. Based on the indicators in this study, researchers found that 88% of teachers who were respondents already had readiness in lesson planning, while 11% were quite prepared, and 1% were low or said they were not ready in preparing lesson planning. Then, in the implementation of learning, researchers found that 81% of teachers already had readiness in the implementation of learning, while 15% were quite ready but constrained by the learning model used, and as many as 4% were declared low or said not ready to carry out learning. Meanwhile, the results of the analysis of teacher readiness in evaluating learning were obtained by 74.1% who were able and had the readiness to compile the latest assessment format in accordance with the provisions in the Independent Curriculum.

This can be seen from teachers who understand the Merdeka curriculum but implement or conduct assessments that are not in accordance with the nomenclature of the Independent Curriculum, especially for Early Childhood Education Institutions (PAUD). So, there needs to be a joint effort between various parties to increase teachers' understanding of the curriculum, obtaining support for integrating values in learning, relevant training, and introducing holistic assessment methods.

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