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. The aim of this curriculum is 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 Merdeka Curriculum as an effort to improve the quality of early childhood education. However, the successful implementation of 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, it is important for educational researchers and practitioners to conduct an in-depth analysis related to the readiness of ECD teachers in facing this curriculum change. This study used 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 already have readiness in lesson planning. 81% of teachers already have readiness in learning implementation, and 74.1% of teachers are capable or have readiness in evaluating learning in the Merdeka Curriculum. Teachers understand the Merdeka curriculum, but in implementation or implementation and conducting assessments that are not in accordance with the nomenclature of the Merdeka Curriculum, especially for Early Childhood Education Institutions (PAUD). So that there needs to be a Joint Effort, between various parties in increasing teachers' understanding of the curriculum, obtaining support for the integration of values in learning, relevant training, and introducing holistic assessment methods.
Keywords: Teacher Preparations; Early Childhood Education; Independent Curriculum

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 advances in information technology, the success of an education system is largely determined by the readiness of ECCE teachers to face the growing demands of the curriculum (Safitri, 2019). 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 environment. Another goal is to give flexibility to teachers to develop innovative and relevant learning methods.

Malang City, as one of the centers of education in Indonesia, also adopted the Merdeka Curriculum as 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 July 12, 2022 states that more than 140 thousand education units will implement or use the independent curriculum in the 2022/2023 school year (Kemendikbudristek, 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. According to Jalal (2020) in also stated that teacher readiness is very important in preparing learning with any conditions and situations. This teacher readiness is the most important thing, considering that the teacher is someone who influences the success of students in the learning process. Therefore, it is important for researchers and education practitioners 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 in achieving the desired educational goals. Similar findings were also revealed by Pixyoriza et al. (2023) which 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 in implementing 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 make a significant contribution in 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 identify strategies in, 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 (2017), teacher readiness includes a deep understanding of the structure and objectives of the adopted curriculum as well as their ability to integrate curriculum values into daily learning (Rouf & Lufita, 2018). Husayn et al. (2023) argues that teachers who feel confident and have a good understanding of the curriculum implemented tend to create a positive learning environment. In addition, research by Johnson et al. (Anindya &; 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 (Zulkifli et al., 2022; Deák et al, 2021).

The Merdeka Curriculum provides opportunities for ECCE teachers to explore the creative potential of children (Lestariningrum, 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; Xu et al., 2023; Nilsook et al., 2021). There have not been many studies that examine the specific readiness of ECCE teachers in the implementation of the Independent Curriculum. Therefore, this study aims to explore a deep understanding of 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 in implementing the Independent Curriculum. An in-depth analysis of the challenges, successes, and needs of ECCE teachers will be outlined with the aim of producing 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 policy makers in supporting the readiness of ECCE teachers to face the demands of a new and innovative curriculum.

METHOD

This study used survey research methods to collect data from Early Childhood Education (PAUD) teachers in Malang City, with the aim of evaluating 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% (Dwi Putri &; Mursyidah, 2022), a sample of 158 teachers from 70 RA schools in Malang City was obtained. Data collection techniques using 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. Where further in the instrument 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, 2018). 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 by 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):

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

The category and classification of data processing results refer to the categorization according to Seventika, Sukestiyarno and Mariani as in the following table (Seventika et al., 2018):

Table 1. Data Processing Results Category

Average Score	Criterion
75% ≤ P < 100%	Good
60% ≤ P < 75%	Enough
0% ≤ 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 in identifying 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

The This research explores the readiness of Early Childhood Education (PAUD) teachers in implementing the Independent Curriculum in Malang City. The results highlight a number of challenges faced by ECCE teachers in relation to understanding the curriculum, integrating values in learning, institutional support, training, and methods of assessment and evaluation of learning. Where it is summarized into planning, implementing, and evaluating learning.

When we talk about planning, there are several things that must be considered, namely related to understanding, training, teaching modules, and preparation of the media to be used. From the survey results, it was found that teachers' understanding in understanding 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. There are about 70% of teachers who 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.
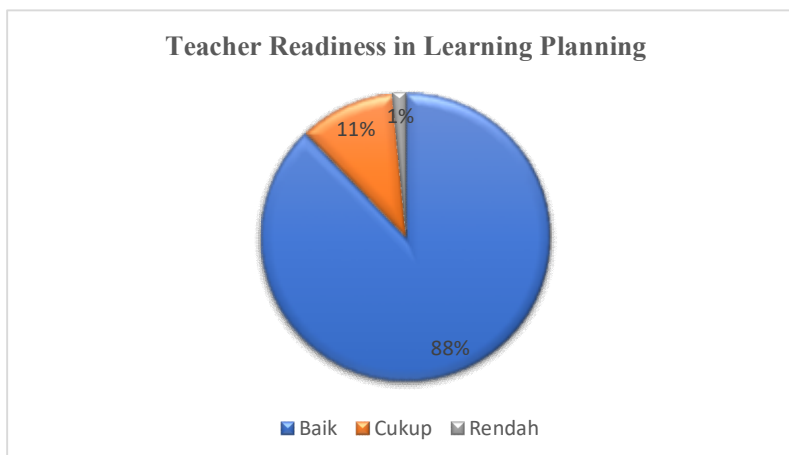

Figure 1. Teacher Readiness in Learning Planning

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 & 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 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 and how to implement curriculum, teachers need to have certain readiness and competence. This understanding is obtained not necessarily through reading alone, but also 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 the majority of PAUD teachers in Malang City had a fairly good understanding of the Independent Curriculum through the training that followed. 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 in 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 in the implementation of learning in the Independent Curriculum. Teacher readiness in implementation consists of initial activities, core activities 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, while 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 the use of unstructured loosepart 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.
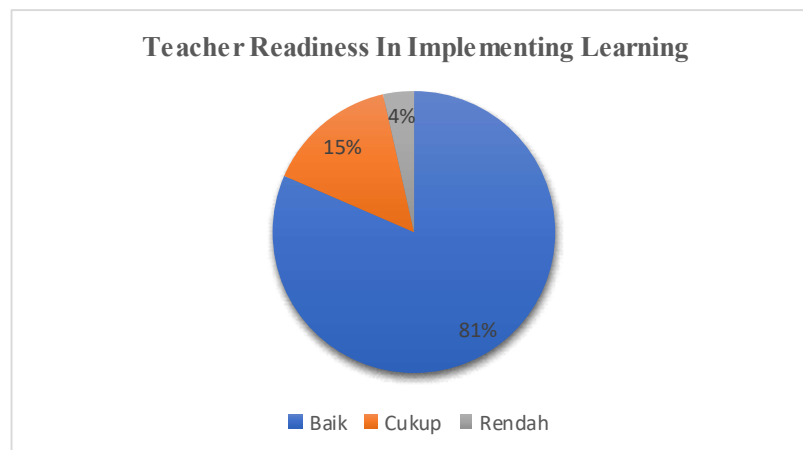

Figure 2. Tecaher Readiness In Implementing Learning

Based on the survey results, 96.3% of teachers have aperceived 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 or approaches or 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), *learning*cooperative, 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 with a percentage of 96.3% of teachers have involved their students in every learning activity.

Thelearning approaches used by several schools in Malang are: scientific approach, STEAM, character-based, literacy-based, interest-based children, some even use Montessori approach. While 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, where in one class students are 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 in the other group in question there is a place for him. If there is no place, children can play in a certain place that has been prepared by the teacher, that place is meant by 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 that support 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. 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 for.

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 the stage 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 the results at the evaluation stage (Febriana, 2019). Evaluation of teacher readiness in implementing the independent curriculum includes the preparation of assessment formats, 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, there are still 14% of teachers who 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, of course, 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 the learning process. In addition, the teachers also conducted workshops to reflect, evaluate, and discuss the follow-up that will be carried out.

So that the results of the analysis of teacher readiness in evaluating learning were obtained by 74.1% who were able and had readiness to compile the latest assessment format in accordance with the

provisions in the Independent Curriculum. While 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.
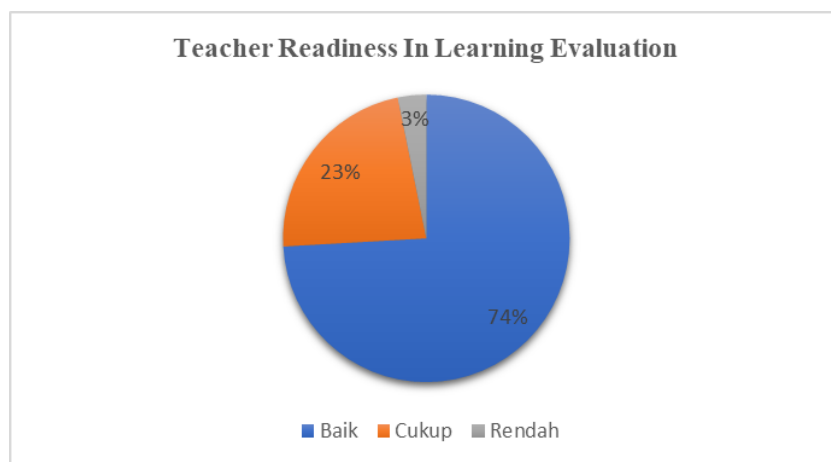

Figure 3. Teacher Readiness In Learning Evaluation

In the context of assessment and evaluation of learning outcomes, the findings point to the need for the development of innovative, portfolio-based assessment methods. Teachers who have used this approach find it effective, but its spread is still limited. This is because there are some educators who understand the independent curriculum completely and some who understand some of the provisions of the independent curriculum. Institutional support in this regard is key, and there needs to be special training to introduce this method to ECCE teachers.

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 gaining a comprehensive understanding of 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 in implementation or implementation and 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 in increasing teacher understanding of the curriculum, obtaining support for the integration of values in learning, relevant training, and the introduction of holistic assessment methods. So that they will be better prepared in implementing 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 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 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 in implementation or implementation and 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 in increasing teacher understanding of the curriculum, obtaining support for the integration of values in learning, relevant training, and the introduction of holistic assessment methods.
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