

## Analysis of Teacher Skills in 21st Century Learning in Elementary Schools in the Independent Curriculum

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### ABSTRACT

This study aims to determine teacher skills in 21st century learning in elementary schools on the Merdeka curriculum. The method used in this study is descriptive analysis with the library research method, an approach that uses literature analysis in collecting data in the field. Researchers obtain data and information by analyzing books and literature, notes, and various reports and various problems that need to be solved in the field. Based on the results of research obtained in the field, it is known that teacher skills in the 21st century must focus on 4C, namely: communication, collaboration, critical thinking and problem solving, and creative and innovative. These four skills need to be implemented by teachers in the learning process, especially in elementary schools so that teacher learning innovation in teaching can increase. In addition to the above, teachers must also be able to update their knowledge so that 21st century skills can be mastered by every student they teach in order to succeed in facing challenges, problems, life, and careers in the future that adhere to the Pancasila student profile.

## INTRODUCTION

In the 21st century, the development of society, both in terms of culture, economy, social and especially the development of increasingly sophisticated technology, affects the world of education in Indonesia in particular. The world of education is required to provide good output from previous years, both in terms of students and teachers. The world of education today is also required to be able to equip students with 21st century skills that teachers must have in teaching. One of them is skills in learning. These skills are the skills of educators who are able to think critically and solve problems, are creative and innovative, have communication and collaboration skills with teachers, students, and colleagues. In addition, the skills of finding, managing and conveying information and being skilled in using technology and information must also be possessed by a teacher. The importance of instilling character education is also very important for students. The importance of instilling character in students is not only because of the many cases that occur in students and adolescents who show a decline in morals and behavior, but also because of the decline in character that should be possessed by every young generation in Indonesia. One of them is honesty, politeness (Agustiawan & Puspitasari, 2019).

Critical thinking and problem-solving skills are considered fundamental skills in 21st century learning. In every subject and at every level of education, the learning and instruction process needs to integrate content knowledge learning with activities that require critical thinking and problem-solving skills (Trilling in Finita, 2015).

According to (Rahayu: 2022) 21st century learning is the result of the evolution of society and the needs that exist around it. Along with the development of the times, human needs and demands of life also change and become more complex. This drives changes in various aspects of life, including in the fields of education and learning. 21st century learning does not make students passive recipients of information or as we often know it as teacher-centered learning. At this time, students must be encouraged to actively participate in the learning process, explore, and build knowledge through interaction and experience in the sense that current learning is student-centered learning. Therefore, 21st century learning emphasizes the development of critical, creative, collaborative, and communication skills or commonly referred to as 4C. Teachers have a very important role in 21st century learning. Their role is no longer as a transmitter of information, but as a motivator, inspirator, and facilitator for students.

The curriculum was published by the government in 2022 through the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) as an effort to improve the quality of education in Indonesia. However, the reality in the field is not as expected. There are still many problems experienced regarding the practice of the Merdeka curriculum, one of which is about resources. There are still many schools that are not ready in terms of technology and information, as well as inadequate infrastructure such as the lack of computers, slow internet networks, and the lack of teaching materials that are in accordance with the demands of the Merdeka curriculum in Elementary Schools.

In addition, the lack of human resources available to practice the Merdeka curriculum application is indicated by the fact that many teachers do not know about the Merdeka curriculum platform due to the lack of training.

This is in accordance with the opinion of (Wuwur, 2023) that the Independent Curriculum requires various resources to be able to run well. These resources include textbooks that are in accordance with the curriculum, learning tools such as teaching modules and learning media, and training for teachers so that they are able to implement the curriculum effectively. If the available resources are limited, this can hinder the implementation of the Independent Curriculum in elementary schools. The availability of adequate resources is the key to the smooth implementation of the independent curriculum in elementary schools. Therefore, joint efforts are needed from various parties to ensure that all schools have the resources needed to implement the Independent Curriculum according to the demands of learning in the 21st century.

This study focuses on teacher skills in 21st-century learning for Elementary School students in the Independent Curriculum to improve 4C skills, namely critical thinking, creativity, collaboration, and communication. With the Implementation of the Independent Curriculum Policy in Elementary Schools, it is hoped that the results of this study will later be able to determine how teachers play their roles, what strategies will be used by teachers, and the supporting and inhibiting factors in implementing the Independent Curriculum in Elementary Schools.

## **LITERATURE REVIEW**

### ***Teacher skills in the 21st century***

In 21st century learning, teachers act as facilitators who guide students in exploring knowledge, direct students in learning, and provide adequate facilities for students. In formal schools, teacher skills in the learning process are required to apply 4C skills (Critical Thinking, Communication, Collaboration, Creativity), this can be realized well if the demands of teacher performance can not only change teaching methods, but also the role and responsibilities of non-formal educators in accustoming children to apply 4C in everyday life. 4C skills must be mastered and possessed by every student in order to face the challenges of the 21st century.

According to Bakrun (2018), the 4C capabilities are:

1. Critical thinking is the ability of students to think critically in the form of reasoning, expressing, analyzing and solving problems. In the era of reform, critical thinking is also used to ward off and filter radical views that are considered unreasonable. Critical thinking skills usually begin with a person's ability to criticize various phenomena that occur around them, then assess from the perspective they use. Then he positions himself, from an inappropriate situation to a situation that is in his favor.

2. Communication (communication) is a real form of educational success with good communication from education practitioners for the sake of improving the quality of education.
3. Collaboration (collaboration) is being able to work together, synergize with various parties and be responsible for oneself, society and the environment. Thus he will always be useful for his environment.
4. Creativity (creativity) is the ability to produce something new. Students' creativity needs to be honed every day to produce breakthroughs or new innovations for the world of education. Creativity equips a student who has competitiveness and provides a number of opportunities for him to be able to meet all his life needs.

Through the above, researchers can conclude that the skills that teachers must have include 4C skills, namely critical thinking, creativity, collaboration, and communication. These four skills must be applied in the learning process so that all activities can be centered on students. First, teachers are required to have creativity in teaching, both operating technology-related computers, the internet and other technologies as learning resources for students. In addition, teachers must also be able to operate digital learning resources that are in accordance with their use in improving professionalism and teaching skills. Second, teachers must be able to provide authentic assessment tools so that students can really get maximum results according to what they have achieved during daily learning. Third, be able to collaborate with fellow colleagues, students and stakeholders involved in advancing the school. Teachers are not only required to be skilled in teaching, but must also be able to collaborate so that a good and comfortable atmosphere occurs when teaching. Fourth, teachers must be able to meet diverse learning needs by using student-centered learning strategies by providing adequate access to digital tools and other digital learning resources while still respecting copyright, intellectual property rights and documentation of learning resources.

### ***Independent Curriculum***

After the Decree of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Number 56/M/2022 concerning Guidelines for the Implementation of the Curriculum in the Framework of Learning Development and Learning Recovery (2022), we fully support the improvement of the curriculum in Indonesia in order to realize a sovereign, independent and individual Advanced Indonesia through the creation of Pancasila Students who are in accordance with the dimensions of the Pancasila student profile. Namely critical thinking, creative, independent, faithful, devoted to God Almighty, and noble, working together and global diversity through the Implementation of the Independent Curriculum. The Independent Curriculum is a curriculum with diverse intracurricular learning where the content will be more optimal so that students have enough time to explore concepts and strengthen competencies (Kemendikbudristek. 2022).

According to Khirurrijal, et al. (2022) the implementation is different from curriculum design and planning. The Merdeka curriculum requires complex

cooperation between teachers and students. Furthermore, in the field of education, the implementation of curriculum development itself has become an urgent matter. Curriculum development is carried out with the aim of simplifying the existing curriculum. The Merdeka curriculum implemented in Elementary Schools is designed to achieve learning outcomes without emphasizing reading and writing so as not to burden students. The structure of elementary school education is largely unchanged.

## **METODOLOGY**

The method used in this study is qualitative descriptive analysis with a library research approach or known as a literature study, according to (Rohmah, 2023) a literature study is a research method that uses various written sources such as scientific journals, books, and other references to study a concept or theme. In addition to concepts and themes, literature studies also utilize supporting data such as research results, statistical data, and qualitative data. This data strengthens arguments, enriches analysis, and supports conclusions. Data analysis helps researchers understand the meaning of data, find patterns, and formulate conclusions.

## **RESEARCH RESULT**

Teacher Skills in 21st Century Learning in Elementary Schools in the Independent Curriculum.

In addition to implementing 4C, namely critical thinking, creativity, collaboration, and communication, teachers can use models and strategies to improve skills in learning in responding to 21st century innovations, including implementing:

### *Active learning*

Active learning is a learning model that involves students actively in the learning process, not just passively receiving information. Active learning can improve student achievement because it helps them to: Connect new and old information, Correct misunderstandings, Reconsider thoughts or opinions, Remember information better. Some examples that can be applied by teachers in improving teaching skills are using learning including:

1. Role playing

Role play involves taking on different roles during a lesson to see things from different perspectives. It encourages critical and non-egoistic thinking, which can lead to increased empathy and seeing issues from a more holistic perspective. Children engage in role play during the 'symbolic' stage of play, but it is still an active approach that teachers use at all levels of education.

2. Science experiments

Science experiments help students to actually see the theoretical ideas we talk about like gravity, magnetism, and cell structure.

Consider experiments like using iron filings to visually show the traces of magnetic fields (check out this great magnet experiment kit on Amazon), using a

microscope to examine cells, or launching a rocket to explore stored potential energy.

Debates help students see things from different perspectives, use logic to defend their positions, and improve their public speaking skills. Teachers can divide the class into two groups and ask them to take one perspective each, or have small groups debate different topics while the rest of the class observes and judges the winner.

### 3. Collaborative learning

Group projects require students to work together to solve problems. Group projects force students to discuss issues, consider each other's perspectives, and build shared knowledge to reach agreement on how to work on the project. Specifically, in a collaborative learning approach, students must take an 'active' rather than 'passive' orientation to learning because they are responsible for developing shared knowledge.

### 4. Guided practice

Guided practice involves the teacher gradually releasing responsibility to the students. It begins with the teacher providing a model task, then having the students work on the task with the teacher, and finally having the students work on the task independently. In this approach, lessons begin with a traditional passive learning approach, and end with active learning after students have built up a foundation of knowledge and confidence.

### 5. Project based learning

Project Based Learning is a learning model that uses projects or activities as media. According to Kemdikbud (2013), students explore, assess, interpret, synthesize, and provide information to produce various forms of learning outcomes.

### 6. Blended learning

Blended learning is a learning method that combines online learning with face-to-face learning. This method combines conventional learning with online learning that can be accessed anytime and anywhere. According to (Riinawati, 2021) blended learning is a learning method that combines various strategies that provide, learning models, and various technological media. Students are expected to be able to understand learning well and actively.

### 7. Contextual Teaching and Learning (CTL)

Contextual teaching learning (CTL) is a learning concept that helps teachers relate the material taught to students' real-world situations that encourage students to make connections between their knowledge and its application in everyday life. Students' knowledge and skills can be obtained from students' efforts to construct new knowledge and skills when they learn, according to Trianto in Wawan Darmawan (2013).

So it can be concluded that contextual teaching and learning is a learning approach that emphasizes student involvement in the learning process that tries to link the material to be learned with events in everyday life so that students can more easily understand the lessons given. CTL directs learning to efforts to build thinking skills and the ability to master subject matter.

### ***Learning Based on Higher Order Thinking Skills (HOTS)***

HOTS (Higher Order Thinking Skill) or often referred to as the ability of skills or high-level thinking concepts is a concept of educational reform based on bloom's taxonomy that began in the early 21st century. This concept is included in education aimed at preparing human resources in facing the industrial revolution. In the 21st century, human resources are expected not only to be workers who follow the government, but to have 21st century skills. HOTS (Higher Order Thinking Skills) skills or commonly referred to as high-level thinking skills are a thinking process that requires students to develop ideas in a certain way that gives them new understanding and implications. Limpan describes high-level thinking as involving critical and creative thinking guided by ideas of truth that each have meaning. Critical and creative thinking are interdependent, as are criteria and values, reason and emotion.

Some of the components above can be used as a guide in teaching and improving skills by teachers in the 21st century in accordance with developments in increasingly sophisticated technology.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of the research and discussion that has been carried out, it can be concluded that in 21st century learning, teachers must have very important and crucial skills in the learning process. Because learning in this century requires students to be more active and teachers as facilitators in the learning process. In addition, teachers must also be able to understand and understand the development of student skills based on 4C (communication, critical thinking, collaboration, and creativity). 21st century learning for elementary school students through the independent curriculum is expected to develop students' potential and skills to compete with the development of the era that is increasingly developing.

The implementation of the independent curriculum in elementary schools also plays a role in creating competitive students, so that they are able to adapt to the development of the era through the Pancasila student profile strengthening project in accordance with the demands of the independent curriculum. Therefore, collaboration and support from parents, principals and the government are expected to produce a young generation that is intelligent, has character, and is ready to face a brighter future.

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