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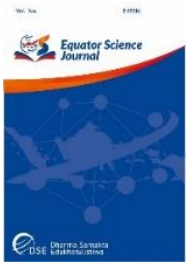



# Curriculum Change vs Changes in The Field: How Contextual is Learning in The Merdeka Curiculum?

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***ABSTRACT***
*The curriculum continues to change but the way teachers teach in teaching science, especially contextual learning does not change. This study aims to see how far the new curriculum (merdeka curriculum) can support teachers in providing contextual learning and what kind of support teachers need to implement an independent curriculum. The research method used is a case study on the learning process in driving schools and K-13 schools. The results of the observations show that there is no difference between the way teachers teach in the driving schools and the curriculum schools. Thus, other support is needed to support teachers in teaching contextual learning such as special training on contextual learning, teacher competency training, and special training to increase teacher motivation.*

## INTRODUCTION

The curriculum in Indonesia continues to undergo changes based on the dynamics of social change in the technological era (Bahri, 2017; Pratiwi, 2019). However, unfortunately, the development of the curriculum has not been accompanied by an increase in the quality of teachers in managing their learning (Susanti, 2021). The quality of teachers in Indonesia is still in a low ranking, namely 14th out of 14 developing countries based on Unesco data in *Global Education Monitoring Report* 2016 (Hoesny & Darmayanti, 2021). In fact, changing the curriculum also means changing the way teachers teach according to the competencies in the new curriculum (Pratiwi, 2019).

The percentage of teachers who have the ability to develop the way they teach according to the demands of each new curriculum is only around 32% (Susilaningsih, 2013). As a result, the implementation of each new curriculum is far from the government's expectations (Alhamuddin, 2014). One of the reasons this can happen is the teacher's unpreparedness for new things (Alawiyah, 2013).

The Indonesian curriculum has undergone changes from 1947 to 2013 (Alhamuddin, 2014) and the most recent is the independent curriculum in 2021 (Kemendikbud Dikti, 2021). The independent curriculum is synonymous with project activities to train students' abilities in solving problems (Kemendikbud Dikti, 2021). Meanwhile, the previous curriculum, namely the 2013 curriculum (K-13), was oriented towards competencies that must be possessed such as attitudes, knowledge and skills (Hakim, 2017).

The reason behind the design of each new curriculum is Indonesia's relatively low score on the PISA assessment, both in reading literacy, mathematics literacy and science literacy (I. Pratiwi, 2019; S. N. Pratiwi et al., 2019). Indonesia wants to improve the PISA score through KTSP and K-13. However, unfortunately, after the implementation of KTSP and K-13, the scores for all literacy including scientific literacy obtained by Indonesian students were still below the average PISA completion score (Summaries, 2019).

One of the dimensions of scientific literacy in PISA is the application of scientific knowledge to everyday life (Fives et al., 2014; Fuadi et al., 2020; Sutrisna, 2021). This ability is not yet possessed by Indonesian students (Fauziah*et al*., 2019). Many of them are unable to relate the knowledge they gain at school to the phenomena that occur (Fuadi et al., 2020). This is because teachers have not provided contextual science learning (Nisa*et al*., 2015).

There are many interpretations of contextual learning (Nashon & Madera, 2013). Generally, research related to contextual learning in Indonesia interprets contextual learning into seven main components, namely: constructivism, questioning activities, inquiry, learning communities, modeling, reflection and authentic assessment (Trianto, 2009); Wisudawati and Sulistyowati, 2014). This research does not refer to these seven components. However, in this research, we interpret contextual learning based on several scientific article references.

Hull (1993) defines contextual learning as learning that involves students' minds to search for meaning in the context and its relationship to the students' sociocultural background. Bennett (2003) states that learning activities can be said to be contextual when the learning activity process is linked to the student's local context. Contextual learning also contains the connection between students' daily experiences and the context of the material they are studying. (Campbell et al., 2000; Sugai et al., 2012)

Contextual learning can make it easier for students to understand science concepts (Hafnidar*et al*, 2016; Khaefiatunnisa, 2015) and improve the science learning process (Maielfi, 2019). Apart from that, contextual learning can also increase interest and achievement (Sakti & Sujadi, 2014; Wijanarko, 2017). However, apart from these advantages, contextual learning has weaknesses where the teacher as a facilitator has to prepare material from various actual sources and this becomes a problem for teachers (Hastuti, 2014). Teachers tend to use only one textbook (Fuadi,*et al.* 2020; Hastuti, 2014). Textbooks prepared by the government are used by 90% of all science teachers (Aqil, 2018). Teachers' demands for teaching learning contextually have been stipulated in the 2013 curriculum (Alhamuddin, 2014). However, its implementation has not been effective, so it has become the basis for the formation of a new curriculum in 2021, known as the independent curriculum (Kemendikbud Dikti, 2021).

Based on the background and literature review above, a problem formulation can be formulated: 1) Can the latest curriculum (independent curriculum) make the learning atmosphere, especially science subjects, more contextual? 2) What kind of support do teachers need to be able to teach science subjects contextually? From the problem formulation, the objectives of this research include: 1) analyzing the level of contextualization of science learning in independent curriculum schools and K-13 schools, (2) identifying the support needed by teachers to provide contextual learning in the independent curriculum. Articles are typed in Microsoft Office Word format. Using Times New Roman font size 11, single space on A4 paper. Paper format 3-3-2-2 (left-up-right-down). The use of sections to divide the text of the paper is optional and left as a decision for the author.

## METHOD

This research is descriptive qualitative research with a case study method. This method was chosen because it is in accordance with the aim of this research, namely to describe in detail contextual learning in schools that use the independent curriculum and schools with the K-13 curriculum. The case study was conducted through observations from March 21 to April 12 2022 in three schools. The first school is a school that still applies the K-13 curriculum. The second and third schools are driving schools that have implemented an independent curriculum. The three schools were observed at two meetings and each school discussed material regarding the Earth and Solar System. Learning activities are recorded in video form, then the video is analyzed using the Videograph application. The data obtained from analysis via Videograph is then analyzed further via SPSS to see the average frequency of each contextual learning indicator. Open interviews with the teachers concerned were also conducted to obtain additional data. However, interviews were only conducted with K-13 school teachers and drive 2 school teachers. Meanwhile, drive 1 school teachers were not willing to be interviewed. We refer to K-13 school teachers as K-13 teachers while driving school teachers 1 and 2 as driving teachers 1 and 2. We will use these terms in the discussion later.

**Development of instruments to measure contextual learning**

As discussed in the introduction, research in Indonesia related to contextual learning often uses indicators based on the seven main components stated by Trianto (2009), Wisudawati and Sulistyowati (2014), namely: constructivism, questioning activities, inquiry, learning community, modeling, reflection, and authentic assessment. This research does not refer to these seven components. The indicators used as instruments in this research are based on several definitions of contextual learning according to Hull (1993), Bennett (2003), Campbell and Lubben (2010), and Sugai (2012). Based on the definitions from these scientists, we synthesized them into indicators as seen in table 1.

**Table 1**. Contextual Learning Indicators

| No. | | Indicators |
|---|---|---|
| 1. | Contextualization of Learning Content | Learning content is related to students' sociocultural background<br>Use local context to explain scientific concepts or phenomena<br>Discuss current issues relevant to learning material<br>Including students' everyday experiences in learning<br>Connecting the concept to be learned with something students already know<br>The concepts that have been studied are related to students' daily lives<br>Provide examples of events that are quite common to all students |
| 2 | Content Relation to Students | Students are involved in explaining familiar experiences or situations according to their knowledge before learning begins<br>After learning the relevant scientific concept (theory), students are directed back to the initial example and again asked to explain it.<br>Students are given the opportunity to provide real examples of the concepts they have learned.<br>Students are given the opportunity to apply scientific ideas to everyday situations. |

## RESULTS AND DISCUSSIONS

The research results can be seen in table 2 and table 3. Table 2 describes the level of contextualization of science learning content in mobilizing schools (schools that implement an independent curriculum) and K-13 schools. The data shows that there is no difference between K-13 schools and driving schools

in the way teachers provide learning contextually. Even driving schools 1 have lower averages than K-13 schools.

Furthermore, it can be seen that science education in both primary school and driving school did not use the local context to explain scientific concepts. Indeed, contextual learning must be relevant to the student and the local context and school environment (Bennett, 2003). This problem occurs because teachers do not know that contextual learning should involve students and local context.

**Table 2.** Level of Contextualization of Learning Content

| Indicators | Percentage of Contextual Learning | | |
|---|---|---|---|
| | **K-13 Schools** | **Driving Schools 1** | **Driving Schools 2** |
| Learning content is related to students' sociocultural background | 0% | 0% | 1% |
| Use local context to explain scientific concepts or phenomena | 0% | 0% | 0% |
| Discuss current issues relevant to learning material | 0% | 2% | 1% |
| Including students' everyday experiences in learning | 0% | 0% | 2% |
| Connecting the concept to be learned with something students already know | 13% | 0% | 3% |
| The concepts that have been studied are related to students' daily lives | 4% | 0% | 11% |
| Provide examples of events that are quite common to all students | 2% | 1% | 3% |
| **Average** | **2,7%** | **0,4%** | **3%** |

K-13 teachers know contextual learning as "*"Learning where the learning process is connected to everyday life."* Meanwhile, Teacher 2 understands contextual learning as "*Learning that brings experiences in everyday life that students usually experience... into learning..."*. Based on the statements of the two teachers, they did not understand that contextual learning was not only connected to everyday life or students' experiences. However, contextual learning needs to be linked to students' socio-culture (Hull, 1993), and actual issues related to learning material (Lubben*et al.*, 1996) because natural science is a science that continues to develop (Yunis, 2018).

Uniquely, although K-13 teachers and driving teacher 2 understand the importance of connecting the material to everyday events and student experiences, the data in table 2 shows that both teachers have not implemented it. Teacher 2 admitted that he was hampered in finding materials for learning due to lack of free time to prepare this. Finally, teachers only rely on one material, namely textbooks published by the government (Nurrita, 2018).

Furthermore, based on table 3, the level of contextualization of content linkage with students is also still low and there is no significant difference in science learning at driving schools and K-13 schools. During the lesson, the three teachers whose lessons were observed often involved students in question and answer activities. However, this involvement does not match the indicators of student involvement in contextual learning.

The lowest percentage is found in the last indicator. Not all teachers provide opportunities for students to express their scientific ideas in everyday situations. This data can be the reason why students do not have the ability to use science to solve problems in everyday life.

**Table 3.** Level of Contextualization of Content Relation to Students

| Indicators | Percentage of Contextual Learning | | |
|---|---|---|---|
| | K-13 Schools | Driving Schools 1 | Driving Schools 2 |
| Students are involved in explaining familiar experiences or situations according to their knowledge before learning begins | 0% | 0% | 1% |
| After learning the relevant scientific concept (theory), students are directed back to the initial example and again asked to explain it. | 7% | 17% | 5% |
| Students are given the opportunity to provide real examples of the concepts they have learned | 2% | 0% | 4% |
| Students are given the opportunity to apply scientific ideas to everyday situations | 0% | 0% | 0% |
| **Average** | **2%** | **4%** | **5%** |

Apart from that, K-13 teachers and 1st motivator teachers do not involve students in the slightest to explain their experiences regarding earth and solar system phenomena. Even though we often encounter earth and solar system phenomena every day (Saputra, 2018). Meanwhile, even though the percentage of drive 2 teachers is very low, they still give students the opportunity to tell their experiences.

Driving teacher 2: *"Areas in the northern and southern hemispheres do not always receive sunlight. have you experienced it? Who has been abroad?*
Experienced students:*"I, ma'am, have lived for a month in England."*
Driving teacher 2: *"What month were you there?*
Experienced students:*"I forgot ma'am, it's summer anyway."*
Driving teacher 2: *"In England, when it's summer, what month does it mean? Who knows?"*

Learning that connects students' experiences with the material will provide meaningful learning for students (Yuberti, 2014).

**Support for Teachers to Provide Contextual Learning**

Contextual learning is a requirement in the K-13 curriculum and the independent curriculum. Moreover, in the independent curriculum, teachers have greater flexibility to teach students according to the conditions of the student and school environment (Kemendikbud Dikti, 2021). This means that teachers from various regions can teach science more contextually through socioculture or local culture where the school and students are located. However, the flexibility provided by the independent curriculum does not guarantee changes in the way teachers teach (Arianti, 2019).

Apart from developing a curriculum, the quality of teachers also needs to be developed. The government has indeed attempted to improve teacher competency through training (Sumaryati, 2013). However, these trainings should be evaluated and continue to be developed so that training objectives can be achieved (Alida, 2021).

The driving teacher 2 stated that the independent curriculum training only lasted for one week. It also contains socialization regarding the contents of the independent curriculum. The driving teacher 2 admitted that he did not really understand the independent curriculum just by following the training.

Mobility 2 teachers and K-13 teachers also admitted that they had only attended training on contextual learning once. From this statement, it seems natural that research data shows a very low percentage of contextualization of science learning. And this also proves that the implementation of contextual learning in K-13 has not been achieved. This becomes an evaluation or basis for forming an independent curriculum. However, changing the curriculum will not mean anything if teachers as

implementers do not understand what the curriculum requires as a guide for their teaching (Alawiyah, 2013). Even driving teacher 2 said that "*There is no need to change the K-13 curriculum, because it is already good. It just needs to be revised to a lesser extent. Because changing the curriculum often makes teachers confused*".

Apart from special training to improve teacher competency, activities are also needed that can increase teacher motivation to continue to become individuals who want to develop (Arianti, 2019). So far, the government has only focused on students' learning interests and motivation (Alida, 2021). Meanwhile, teacher motivation has received little attention.

## CONCLUSION AND SUGGESTION

Science learning in drive schools is no more contextual than in K-13 schools. The contextual learning expected by the independent curriculum cannot be implemented well if there are no efforts to change the way teachers teach. Teachers need to support providing contextual learning according to the requirements of the independent curriculum.

Based on the conclusions of this research, it is hoped that it can provide guarantees for government policies regarding education. The government must start to see that teachers are the spearhead of education. Teachers are on top of the curriculum. Curriculum changes that do not change the way teachers teach will not improve the quality of education.

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