

Analytical Causes of Indonesia Low-Quality Education System Based on PISA

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Abstract. PISA (Programme for International Student Assessment) is a program initiated by OECD member countries, including Indonesia since 2000. PISA data has influenced education systems worldwide, including Indonesia's curriculum adjustment policy. However, Indonesia's PISA results have consistently been below the world average for the past 20 years. This study aims to identify factors contributing to this low achievement. A literature study was conducted by reviewing books, articles, reports, and other sources related to education quality and PISA results. The data obtained were analyzed thematically. The findings revealed that factors such as teacher quality, curriculum burden, teacher administrative burden, and issues with educational levels contribute to the low scientific literacy of students. These findings can serve as input for improving the curriculum and its implementation, addressing challenges such as improving teacher quality, addressing curriculum burden, and streamlining administrative processes.

Keywords: Education curriculum adjustment, Quality of Education and PISA Outcomes

1. Introduction

PISA is a program initiated by countries that are members of the OECD (Organization for Economic Co-operation and Development). PISA was first held in 2000 to assist countries in preparing human resources to have the competencies expected in the international market. It is undeniable that the existence of PISA (Program for International Student Assessment) has influenced the quality measurement and education system in the world. Many countries have adjusted their education systems and adopted PISA's standard, and Indonesia with one accord. The PISA assessment consists of tests in reading, math, and science, regardless of the national curriculum. The target was only tested on students aged 15 years through random sampling. The subject and object targets are believed by the whole world to have strong legitimacy in describing the quality of education in a country. This can be seen from the response of the mass media covering the official results from PISA in each participating country. Every three years, PISA releases the results of its assessment. If the results are good, the country can be at the top level in the achievement index. In that case, it is considered a country with educational standards that align with the needs of the international standard. Conversely, suppose the country obtains below-average results and occupies the lower level in the PISA index. In that case, it is considered to have quality education below the standards required by the global market and is required to improve its national education system immediately.

PISA has been successful in driving changes to the national education curriculum. Indonesian education curriculum adjustments routinely occur after the publication of the PISA assessment results: 1) The curriculum changes in 2004 focused more on the competency-based

curriculum (CBC). This competency-based curriculum emphasizes the development of specific competencies and tasks following established standards; 2) Curriculum changes in 2006 after six years of Indonesia being a PISA participant, namely the Education Unit Level Curriculum (KTSP). KTSP gives more freedom to teachers to plan to learn according to the environment and conditions of students and school conditions; 3) The 2013 curriculum learning approach emphasizes student competence according to the mandate conveyed in PISA.

In Indonesia, PISA has successfully encouraged national educational curriculum changes. In the Regulation of the Minister of Education and Culture Number 69 concerning Basic Competencies and High School Curriculum Structure in the appendix, it is stated that the 2013 Curriculum was developed based on external factors, one of which is the flow of globalization and the low achievement of Indonesian educational values in TIMSS and PISA. This prompted the Government to change the curriculum system in Indonesia [1]. Curriculum improvement is a necessity that every country in the world must pass, and this is because to keep up with the increasingly advanced times. In order to function correctly, the components of the curriculum must also be suitable and always be adjusted to the times. In fact, after the curriculum changed, the results were not as expected. This is at least when viewed from various indicators, both external and internal. Indonesian student assessment scores at the Program for International Students Assessment (PISA) for the last 18 years have tended to be stagnant. In 2018, 70% of Indonesian students were still below the minimum competency for reading, 71% of students were still below the minimum competency for mathematics, and 60% of students were still below the minimum competency for science. Indonesia has consistently been one of the countries with the lowest PISA result rankings.

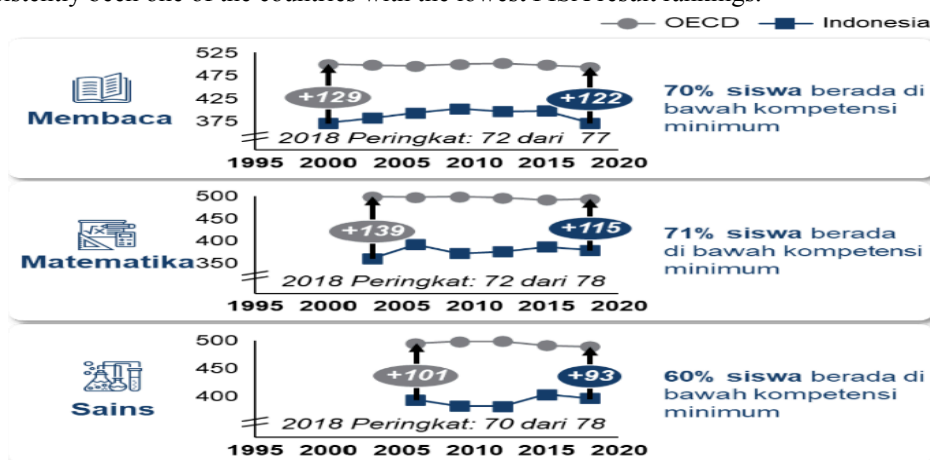


Table 1 (OECD, in the Academic Paper of the National Education System Bill, 2022)

The PISA results, as in table 1 above, were taken very seriously by the government through the efforts made by the ministry of education and culture by making several policies related to Indonesian education. One of them is the revision of the existing curriculum. The curriculum adjustment includes increasing the competence of teachers, students and school governance so that it meets the demands of the community and stakeholders in accordance with the results of PISA. Nadiem Makarim, chief of the education ministry, stated that the results of the PISA survey should be able to provide a new perspective for improving education[2].

Based on the description above, improving the quality of the Indonesian education system is necessary. Therefore it is necessary to identify what are the factors causing the low achievement of PISA results in Indonesia so that appropriate solutions can emerge to overcome them.

2. Method

The data is from secondary data in the form of research results from various articles, library sources and documents that are in accordance with the theme of the factors causing the low scientific literacy ability of students. as stated [3] in library research, library research is not only the first step in preparing a research framework (research design) but the same time utilizing library resources to obtain research data. The data obtained, then collected, compiled, studied, analyzed, and concluded so as to get recommendations regarding literature studies.

3. Discussion

As measured by the results, the low quality of National Education can be caused by various influencing factors. Among the important factors are the following below:

3.1. Teacher Factor

Teachers are the main factor in the advancement of education. Subandi Sardjoko, Deputy Minister of PPN/-Head of Bappenas for Human, Community and Cultural Development BAPPENAS, said that qualified teachers are the key to the entire education process. According to him, the quality of education is determined by the quality of teachers. Teacher quality is a determining factor for the quality of learning in the classroom, which is reflected in student learning outcomes. One of the factors for the low quality of National Education is the low quality of teachers in Indonesia. According to UNESCO's 2016 Global Education Monitoring (GEM) Report, education in Indonesia is ranked 10th out of 14 developing countries. Meanwhile, the teacher component ranks 14th out of 14 developing countries.

World Bank researcher Rythia Afkar considers that the quality of teachers in Indonesia is low based on a survey he conducted in 2020. Rythia conveyed this in a World Bank survey release regarding learning loss due to the Covid-19 pandemic in Indonesia for 1.5 years final. He mentioned the low quality of Indonesian teachers, starting from competence and teaching ability. Indonesian teachers who were surveyed had reasonably low quality[4].

3.2. Teachers equality

In addition to the quality of teachers, the number of teachers is still a significant factor in improving the quality of education. It is hard to imagine if many schools still need teachers to get quality education. Based on the 2019 Basic Education Data (Dapodik), 24.45% of education units still need PNS teachers (excluding school principals and education staff). Education units that lack more than half of the teacher's needs are around 17.65%. Meanwhile, education units lacking teachers are between 50-10%, around 17.41%. The education units that meet the needs of teachers are around 21.12%. In addition, there are also academic units with excess teachers, namely around 8.23 per cent and those currently experiencing excess teachers, around 11.14% (Novianto, 2020, p. 84).

3.3. The weight of the curriculum

The curriculum that we use nowadays is an academic subject design. The academic subject curriculum is about knowledge. Expertise has compiled that knowledge systematically,

logically, and solidly in subjects. These subjects are given in every school. Students who are in school must learn all subjects. The goal is for students to master knowledge. Thus, education is more intellectual development (Arifin, 2017, p. 128). Educational Practice with an academic subject curriculum design incorporates a lot of subject matter that students must follow. The many aspects included in the curriculum increase the burden on students. As a result, school becomes an unpleasant place for students to learn. They are not comfortable studying and do not feel at home for long. According to Kak Seto, an expert and education practitioner, for students to learn, then he will learn in a fun way, both at school and outside of school. However, if the child is required to go to school with a very dense curriculum, then the child will not be comfortable learning. Currently, schools only become factories, and children become robots. [5]. According to Kak Seto, the dense curriculum not only makes students uncomfortable learning. Curriculum that is too dense, teachers who are not ready to teach, that is also violence against children[5]. Ideally, according to Seto, 4-5 elementary school subjects are enough like in developed countries in Germany. Elementary school age, children are indeed given the opportunity to play rather than study serious material[2].

The applicable curriculum in Indonesia is often seen as rigid and focused on content. More opportunities are needed to understand the material and reflect on learning. The content of the curriculum is also considered too theoretical; it is difficult for teachers to translate it practically and operationally into learning materials and class activities [6]. From the results of evaluations carried out by the Ministry of Culture and Culture in several regions of the country, it was found that the learning load that students had to bear was too much.

3.4. Administrative Expenses

Previous study found that, in general, teachers in Indonesia are still concentrated on preparing administrative documents. In a qualitative study at a school in Magelang, [5] found that most teachers were not motivated to make lesson plans because their action in class was more important than writing complicated and complex sheets of script. Previous study criticized teachers' practices in developing countries that seem to pursue meeting administrative needs for teaching and overriding student teaching, which requires higher preparation.

1. Educational stage

The portrait of national education will always experience problems, changes to the curriculum will not work effectively, and the quality of education will be low, one of the factors being the arrangement of the structure of education levels. Generally, there are two educational pathways after students graduate from elementary school. One track is vocational schools, where students are prepared for work. Meanwhile, another route is a public school where students will continue up to university. Not all elementary school graduates will enter public schools with consideration of intellectual abilities, interests and needs. Nevertheless, unfortunately, after graduating from elementary school, there is no other choice; students must enter public schools.

As a result, only 30% of students are eligible to enter high school. Meanwhile, 80% of junior high school graduates are all senior high school cooks. This is one source of serious problems in our education that still need to be solved. Entering all primary school graduates into one choice results in lower quality of education. This is because 30% of students have to adjust to the majority of students who are unable or not interested in entering the public school pathway. The condition of these students (elementary/junior high school graduates) is the target of the PISA assessment, so it is almost certain that their results will be low.

In some other countries, there are various types of schools at the junior high school level. For example, various types of vocational schools prepare them after graduation. This SLTP is intended for two-thirds of elementary school graduates who are intellectually lacking to follow the SLTP curriculum and must continue to high school. So it is not the economic gap or any other kind that endangers the nine-year compulsory education, but rather the absence of schools with a curriculum that matches the learning ability of 70% of students who cannot afford it.

4. Conclusion

In the nearly 20 years since the release of the PISA, the quality of National Education has remained relatively high. The entire score of the survey results is always below the average and classified as low order. Several factors are causing the low achievement of PISA results, indicating the low quality of education. Among them: a). Low quality of teachers b). The weight of the curriculum load c). The heavy administrative burden of teachers, and d). The educational level is not conducive.

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