

## Curriculum Simplification and Subject Reduction to Improve the Quality of Education in Indonesia

Taofik Andi Rachman<sup>✉1</sup>, Euis Latipah<sup>2</sup>, Supiana<sup>3</sup>, Qiqi Yuliati Zaqiah<sup>4</sup>

<sup>1,3,4</sup>UIN Sunan Gunung Djati Bandung, Indonesia

<sup>2</sup>STAI Al-Azhary Cianjur, Indonesia

✉ [tarachman40@gmail.com](mailto:tarachman40@gmail.com)

**Abstract.** The Indonesian curriculum is considered to have too many subjects. Indonesian students also do not focus on mastering the expected competencies. Finally, Indonesia has always failed in the international level assessment of PISA during its implementation. In fact, it is stated that Indonesian students need one hundred years to match the sophistication level of students' thinking from the average student of PISA participating countries if Indonesia continue to use the same education. The OECD as the organizer of PISA encourages changes in the education system for Indonesia in order to improve the quality of international-class education. One of the concerns in Indonesian education is the burden of many subjects. The purpose of this study is to describe several arguments for simplifying the curriculum and reducing the subjects in elementary schools in improving the quality of Indonesian education based on expert opinion, research and experience of educational performance in other countries. This article is a position paper to scientifically strengthen an opinion. Qualitative methods are used in this study where data are compiled, analyzed, and concluded. The results of the study indicate that curriculum simplification is necessary to focus students' competence and improve the quality of education. This study proposes several arguments that strengthen this effort, namely not all curriculum content must be a subject, cognate curriculum content can be integrated, many subjects become a burden on students, and so on. So, with this argument it will strengthen the desire to simplify the curriculum in elementary schools.

**Keywords:** Curriculum Simplification, Subject Reduction, Indonesian Education, PISA

**How to Cite:** Rachman, T. A, Lutipah, E. Supiana, & Zaqiah, Q. Y. (2022). Curriculum Simplification and Subject Reduction to Improve the Quality of Education In Indonesia. *Proceeding The 4<sup>th</sup> International Conference on Elementary Education*, 4(1), 815-825.

**INTRODUCTION** ~ Indonesia has participated in the Program for International Student Assessment (PISA) several times to determine the quality of education according to world standards. This participation has always received a low score as a result, Indonesia must continue to improve the existing management and education system. The last PISA report in 2018, Indonesia was in position 74 out of 79 member countries (Schleicher, 2019). Previously, in PISA 2012, Indonesia was ranked 64th out of 65 countries. Then PISA 2015, ranked 64th out of 75 countries. It can be seen that the score of Indonesian education at the global level has decreased significantly (OECD, 2019).

One of the efforts made by this nation to improve the quality of education in order to create young people who are ready to enter the international market is by changing the curriculum. PISA achievement scores should indeed be able to influence policy changes in the national curriculum (Sjøberg, 2018). The most fundamental change in the education system, that is expected from the results of the PISA assessment, is a change in the curriculum.

The curriculum is indeed one of the important components in the implementation of education to achieve certain goals for a country. Thus, adjustments must be made periodically

because the curriculum must always be relevant to the needs of the times. In fact, if the curriculum can exceed the times. So that the curriculum can be flexible and futuristic in adapting to the changing times and the ever-moving world. The curriculum is indeed one of the important components in the implementation of education to achieve certain goals for a country. Thus, adjustments must be made periodically because they must always be relevant to the needs of the era. In fact, if the curriculum can exceed the era. So that the curriculum can be flexible and futuristic in adapting to the changing times and the ever-moving world.

The goal is that Indonesia can catch up with this lag. In the OECD publication entitled "The Future of Education and Skills: An OECD 2030 Framework" that 21 countries do not have a curriculum that focuses on future planning needed in global life. The competencies needed by the 21st century life are critical, creative, research-based, initiative, informative, systematic, communicative, and reflection way of thinking (OECD(a), 2018).

The current Indonesian curriculum still has problems. The general chairman of the Indonesian Teachers Association stated that the Indonesian curriculum was too heavy and rigid. There are too many subjects and the learning load is too dense, causing students not to focus on mastering the desired competencies (indozone.id, 2020).

Indonesia requires elementary school students to study 6-10 subjects. Meanwhile, elementary school students in Singapore who have high PISA scores only study 3 subjects, English, mother tongue (Malay, Mandarin, Tamil), and

mathematics. In China, the top country in the 2018 PISA score, the focus is on teaching only 2 subjects, Mandarin and mathematics.

In junior high school, Indonesian students study 14 subjects. Then they go to high school studying 15-16 subjects. Meanwhile, high school students in Singapore and Hong Kong who have high PISA scores only study 6 subjects.

It is very important to reduce the required subjects to focus on what children really need. Also, the learning burden also needs to be reduced to lighten. The simplification of this curriculum must be oriented towards an increasingly disruptive future in every line of life but not forgetting the goals of national education and identity.

The curriculum must be changed to be more flexible because the current rate of change in times and technology is too fast. It used to take hundreds of years, to bring out new developments, now five to ten years can change significantly.

The curriculum and subjects are too many, the focus of the competencies that students will have after graduating from school is questioned. Elementary school children currently have a way of thinking and behavior that is not so good, their problem solving is low. Low mathematics, low literacy, almost all educational processes and outcomes fail.

The discourse on curriculum revision should be at the point of educational plans needed for the future by reducing student subjects and focusing on specific learning. In a day, elementary students only need to learn one or two subjects to focus more on learning the skills needed in disruptive life. While the current curriculum, the

number of subjects ranges from three to four subjects in a day.

The new educational curriculum should ease the workload of teachers as a result of the reduced number of subjects taught in class. Thus, reducing subjects at the primary school level will also provide sufficient time for teachers to focus on child outcomes, not just administration. As a result, the curriculum ensures that education quality indicators must be implemented.

In another study, it was shown that Indonesia's efforts to improve PISA assessment results by changing the curriculum (Hewi & Shaleh, 2020). Other research also shows Indonesia's education reform in the field of science (Suprpto, 2016). In fact, there is research outlining the curriculum innovations needed to improve the quality of Indonesian education (Rachman, 2021). However, research on curriculum simplification and subject reduction needed to improve the quality of Indonesian education is still lacking. For this reason, the purpose of this article is to describe arguments that can build a scientific basis in an effort to simplify the curriculum and reduce subjects in this country school, especially elementary schools.

## **METHOD**

This article is a type of position paper research. The researcher chooses a certain side of the topic and builds arguments to strengthen certain opinions. The article will use facts, opinions, and other forms of evidence to ensure that its opinion is the best. To do this, the results of other studies and expert opinions are collected for this position paper and then an outline of the arguments is made. It is

important to ensure that this article considers all aspects of the problem and presents it in a way that is easily recognizable to the reader (Hairston, 1982). The steps in writing this position paper are: a. Choose a topic for the article; b. Conduct preliminary research; c. Challenge our topic; d. Continue to collect supporting evidence; and e. Making an outline (Fleming, 2019).

## **RESULTS AND DISCUSSION**

The issue of literacy at the end of the elementary school level (SD) in Indonesia is still a serious problem. There is a fact that almost half or 46.83 percent of elementary school students in grade 4 are less able to read. This is based on research by the Policy Research Center, Research and Development Agency of the Ministry of Education and Culture (Kemendikbud). Moreover, this data is corroborated by world bank research, which reveals the fact that 55 percent of junior high school (SMP) graduate students in Indonesia are still functionally illiterate.

Reading skills should be completed when students are in the early grades of elementary school. If the basic competencies have not been completed, then they will be very difficult to learn at the next level. Finally, it makes children reluctant to go to school and do not want to continue to high school. The inability to read in elementary school students is certainly not solely their fault. Based on research from the Ministry of Education and Culture, there are several causes found in the field. Among them, access to books is difficult and even non-existent. Then, the curriculum from the country does not support the process of learning to read in the classroom at the initial level.

There is even an assumption that if all the books are full text, then children entering elementary school are considered to be proficient in reading. In fact, many of the students did not experience early childhood education before. Thus, the number of subjects experienced by them makes the focus of our curriculum unclear and even basic literacy competencies are not mastered properly.

### ***A Lots of Burden but Shallow and Forgotten***

Schools have a learning load that is too dense, making children feel uncomfortable, full of learning targets. The curriculum requires them to study with various subjects that are too forced and become a burden. Many of the subject matter in school is irrelevant to their living conditions and daily needs.

The national education system is proven not to develop the soft skills needed in their future, be it creativity, collaboration, communication, critical thinking, computational logic.

Students are not accustomed to critical and creative thinking which gives birth to the innovation skills needed in the future. The load of subjects that must be followed by students is also very large, but it does not have much influence on the way students think and behave. Moreover, many learning materials in schools are not relevant to the realities of needs in the 21st century. In fact, students only learn theory and do not practice the theory they learn. They should be able to apply knowledge and be a solution to minimal problems from themselves.

The education model in Indonesia that is currently being used is still the 'filling the bottle' model, just to teach lessons.

Students are not stimulated to increase curiosity, like to investigate, and stimulated the development of their imagination.

Subject scores of most students at school are indeed high. However, they do not have a focused and deep understanding of the subjects they study. In fact, often old subject matter is simply forgotten because it has not been studied and does not exist in their real life.

They do not remember the knowledge of the subject matter they have studied because they have to know a lot and memorize it. Finally gave up old memorization to new memorization and continued like that every new material. They will quickly forget it because they think the memorized information is not important, does not touch their daily life and is only needed during exams.

### ***No Creation Space in a Solid Curriculum***

Education should provide the widest possible creation space for children's development. One thing that must be considered is the pattern of education in schools. However, education in schools is considered too burdensome for students with the large number of subjects that actually limit children's space for expression. The creation space is very important because these soft skills are indispensable in finding solutions and capital for innovation and productivity of the country.

The creation space in the curriculum for children develops with joy, critically, creatively and prepares to become hope in the future. Indonesia must make policies so that there are not too many subjects (overload) so that there is room

for children to develop according to their needs.

Indonesia must learn that subjects that are too excessive don't make students smarter, but become a burden and eventually create stress. Therefore, the government must change the pattern of education so that students are given the space to be creative as much as possible and must be prepared to adapt to the changing times that are increasingly disruptive. Although each school and teacher have different characteristics, in general there must be similarities in moving Indonesia to become a developed country in the future from human innovation.

Children should also be given sufficient space to get to know their family, religion, education, and what is no less important is to bring up the way of thinking and soft skills needed in their future lives.

The decision to reduce the number of subjects is very appropriate to provide the space for creation and improvement of the required competencies. With it, Indonesia has a bright generation to be the capital towards a developed country. In other countries where the quality of education is better, there are not many subjects. The educational design, the subjects are few and deep.

Children are creative human beings, many things they can do with imaginations flying in their heads. The task of parents and schools should be to facilitate so that the development of children's creativity is not hampered.

Today everything is digital and technologically advanced. This sophistication is the result of human

creativity and innovation. In order for Indonesian people to be creative and innovative, they must learn from an early age. One of them, accustomed since sitting in elementary school. Both are important competencies that will be useful in the future because it gives rise to a way out and solutions.

The research from the McKinsey Global Institute, states that almost half of the work that humans do today has the potential to be automated by robots with existing technology. Then, is there work that can be done for humans in the future, the answer depends on human innovation skills (Manyika et al., 2017).

The need for a useful time and space in the curriculum so that children can think about and do activities that generate creativity. With reduced subject, children can be invited to play, create certain items or discuss minor problems and then be asked how their imagination can improve it.

This creative activity in childhood is to create thinking out of the box. Activities of play, problem-solving, intuition, analogy and imagination are the keys to foster creativity and innovation. In innovation there is a special emphasis on critical thinking, creative, collaboration, and communication skills (Bedir, 2019).

### ***Curriculum Limitations Require a Flexible Curriculum***

Basically, the curriculum is only an instrument and not everything, but it has the potential to determine the quality of education. The curriculum cannot run well if one of the key actors in the success

of education, namely the teacher, do not have the competence to run it.

Competent and inspiring teachers, no matter what curriculum they use, will produce better students. Preparing qualified educators who understand the curriculum is also important. Because, qualified teachers can overcome the weaknesses of the curriculum, while the perfect curriculum will not be able to help teachers who are not qualified.

One of the previous limitations of K-13 occurred in the readiness of teachers to implement the curriculum. To create an active learning atmosphere with integrative thematic material, it is very necessary for teachers who are able to direct students in discussing, broad-minded so that they are able to combine various subjects in one big theme.

The limitations of the curriculum also exist in that it always changes according to the times. This change is because the academic, industrial, technological and socio-cultural worlds continue to develop. The curriculum updates itself so that graduates are able to compete and create opportunities from the changing world that is now moving very fast.

This change will also have an impact on the economy and jobs that will be faced. The knowledge and skills acquired in the past will become irrelevant in the business world, if they do not learn to adapt to changing times.

A simpler and more flexible curriculum especially in primary schools will reduce the extreme changes and costs required. Especially if the national curriculum only discusses general education, while the details are carried out by schools. So that the energy and costs of changing the

national curriculum can be focused on improving the quality of teachers and school management.

The simple curriculum and flexibility are useful for schools to develop their own curriculum according to the changing environment and student learning needs.

After all, the quality of education, besides being influenced by the curriculum used, is also very much determined by quality teachers and schools. Certainly, a good, open, dynamic and flexible curriculum that can accommodate the world's skills, and which is supported by the best teachers and schools.

### ***Many Curriculum Materials are Less Useful in Children's Lives***

Compared to developed countries, Indonesian children have a heavy learning burden. But in fact, the quality of education in developed countries is proven to create a more mature young generation in terms of knowledge, skills, technology, and readiness to enter the real world.

It should be understood that not all knowledge must be mastered by each individual student. Moreover, some educational materials are not appropriate to be given to children. Thus, the lessons that have been given are actually not all relevant to the needs of children in life in the future.

There are some lessons that are not a priority and do not have to be mastered by all children, but are forced. When learning about the solar system, students are required to memorize the area of the earth, the distance to the sun, and others. Apart from knowing, there is no clear benefit from this memorization for the

future life of the child. When they become entrepreneurs, doctors, engineers, lawyers, soldiers, politicians, pharmacists and other professions.

Then the higher material, sine, cosine, and tangent in mathematics, whether these lessons are useful for the achievement of the profession life above. The answer barely had any effect on their career life.

This nation must evaluate and select learning materials that are less important, and not general needs. Then ensure that the material provided for Indonesian children at school is really useful for their lives in general in the future. Not special learning that can be given when they study in certain majors in higher education.

If there are lessons in elementary, junior high, and high school which are then not used at all in future life, the lesson hours are reduced or eliminated.

there are simple skills that need to be taught to students in elementary schools such as understanding anti-bullying, understanding waste management, anti-corruption activities, first aid in minor accidents, internet technology, writing, knowledge of the dangers of drugs, knowledge about the dangers of smoking, bathing, washing hands, maintain cleanliness, and so on. In religious education, it is like knowing God and carrying out His Sharia.

For the future needs of students, there are skills that they must master by learning according to their age and ability. Based on a World Economic Forum report entitled The Future of Jobs Report 2020, it identifies the top 10 skills. These ten skills are classified into 4 types of skills, namely

1. Problem-solving, 2. Self-management, 3. Working with people 4. Technology use and development (World Economic Forum, 2020).

Critical thinking and problem-solving skills are at the top of the list of skills. Problem solving skills are supported by analytical thinking and innovation skills. Other related skills include problem solving skills such as critical thinking and analysis, and creativity, originality, and initiative. The rest of the children must be trained in self-management skills such as active learning, resilience, stress tolerance and flexibility. Then the skills of using technology and leadership (World Economic Forum, 2020).

### ***Curriculum Content Doesn't Have to Be a Subject***

Indonesia has a plan to become the 5th largest economic power in the world, in accordance with Indonesia's vision to become a developed country in 2045. The vision is for one hundred years of independence, especially when Indonesia is experiencing a demographic dividend. There are requirements for this nation to achieve the goal of becoming a developed country and a high-income country, namely infrastructure, human quality, mastery of science and technology, government bureaucracy, regional spatial planning, as well as economic and financial resources.

One of the economic resources in developed countries has entrepreneurs above 14 percent of the total population. However, Indonesia only has a 3.1 percent number of entrepreneurs. It is difficult to create new entrepreneurs because the educational curriculum is only on technical skills, such as reading, memorizing, and arithmetic, and has not

trained students to think critically, creatively, and solve certain problems.

Finally, the concept of entrepreneurship is needed to be included in the curriculum starting from elementary school (SD). Although in the field, it has been a long time, only expensive schools have implemented an entrepreneurship curriculum. Especially SD international schools.

Of course, the content of the entrepreneurship curriculum or the skills needed in a child's future life does not have to be a separate subject. However, it can be integrated into certain subjects or learning outside the subject.

The integration of subjects allows students to take learning holistically, incorporating the relationships between specific learning content. In elementary learning, it can focus on the relevance of content in helping children acquire basic learning. For example, Indonesian subjects can combine literacy and cultural competencies including reading, writing, listening, speaking, literature, drama, social studies, and civic education.

Even literacy competence is an integration of reading, writing, understanding activities, analysis, communicating and a number of other abilities.

The integration of these competencies and skills is done by connecting, so that it become a complete subject. It is designed to help students understand the lesson as a whole subject, not as separate facts from itself.

In the 2013 curriculum too, character education does not become and add to existing subject matter. Character

education is integrated through teaching strategies, classroom management and evaluation activities. The strategy for integrating character education into learning begins with the preparation of the lesson Plan (RPP). The preparation of the lesson plans accommodates the entire learning time, both the preliminary stage, the core stage and the closing activity. Teachers must identify student activities related to character education in step-by-step learning from beginning to end.

So that a certain competence and skill does not have to be a subject but can only be integrated with other subjects or become learning outside the subject. For example, Indonesia can have 60% of students' learning time on subjects and another 40% are other activities needed in their lives that are not subjects. Entrepreneurial activity can be included in these other activities. Children can trade on market day programs held at schools and invite the community.

### ***Less Subjects, More Focused and Deeper***

Developed countries teach with a less number of lessons but deep. Simplifying subjects in schools is believed to improve the quality of education. It is because the burden on students and teachers will be reduced. So far, the learning load of Indonesian students is too big, so they need to know a lot, but it's shallow.

The subjects reduction is intended to make students more focused on certain desired competencies. However, the reduction is more effective if it is supported by quality teachers and good teaching techniques.

Indonesian elementary school students only need to study 3 subjects. Literacy-related subjects are in the form of

Indonesian language subjects and numeracy in the form of mathematics subjects. This is as demanded by PISA.

The desired literacy is not only the ability to read, but the ability to analyze a reading, and understand the concepts behind the letters. Including numeracy competence means competence in analyzing using numbers.

PISA itself explains that literacy competence has an emphasis on understanding and reflecting on the writings that have been read to get new ideas. This competency is stated not to be possessed by children in Indonesia so that the PISA score does not experience a significant increase. From PISA data, it is explained that grade 3 junior high school students are suspected of not being able to apply basic literacy competencies correctly from even simple data (Rizal, 2018). Even the results of the PISA study, two out of three students in Indonesia are not able to extract relevant information from one reading source (OECD, 2015).

Curriculum simplification in Indonesia is not only limited to literacy and numeracy-related subjects that are focused on in PISA. However, Indonesia also needs religious subjects that strengthen the character and understanding of religion. This is in order to achieve the goals of Indonesian education, one of which is to form dignified morals and people who believe and fear God Almighty.

These three subjects were chosen because they are fundamental competencies and are required by all students, across all their professions in the future. Literacy, numeracy and religion are competencies that need to be developed in depth in a child's life. These

three subjects can use up 60 percent of students' time in school. The rest they learn life skills, innovation skills, problem-solving skills, entrepreneurship and social interaction.

Subjects reduction is needed, but until now no one has been willing and dared to act, including the Ministry of Education and Culture. Because there is still a response that subjects reduction will directly reduce the teaching staff. It could be true, subjects simplification can reduce the need for teachers in Indonesia. However, the effect is that the number of teachers can be spread evenly in other areas. So far, in remote areas the need for teachers is very large, especially if there are many subjects.

The subjects reduction also has an impact on teaching hours for teachers who have been certified to receive professional allowances because they are required to teach 24 hours a week. So, with the reduction, they will be short of teaching hours. Even though there are learning activities that are not subjects. They could take this to make up for the shortage of hours.

So, the subjects reduction must be done to improve the quality of education in Indonesia which is still low compared to other countries. Pritchett stated that it took 317 years for Indonesian students to match the level of thinking sophistication of students from other OECD member countries (Pritchett, 2013).). Even based on research, Amanda Beatty explained that Indonesian students are ready to face the 21st century when the 31st century approaches or for 1000 years. This is because the study calculated that as long as students entered elementary school until they graduated high school, they

only improved simple counting skills by only zero point zero percent (Beatty et al., 2018).

## CONCLUSION

Currently, the Indonesian curriculum is considered to have too many subjects. As a result, students are not clear in mastering the desired competencies. Indonesia has always failed in the international assessment of PISA from the start. In fact, it is stated that Indonesian students need hundreds of years to match the sophistication thinking level of students from PISA member countries if they continue to use the same education. The OECD, the organizer of the PISA test, also encourages changes in Indonesia's education system and management in order to improve the quality of international-class education. One of the concerns in Indonesian education is the burden of many subjects.

The results of the study indicate that curriculum simplification and subject reduction are necessary to focus students' competence and improve the quality of education. This study proposes several arguments that strengthen this effort, namely that many subjects burden students, not all curriculum content must be a subject, cognate curriculum content can be integrated, and so on. Thus, this argument will strengthen the desire to simplify the curriculum and reduce subjects in elementary schools.

## REFERENCES

- Beatty, A., Berkhout, E., Bima, L., Coen, T., Pradhan, M., & Suryadarma, D. (2018). 15 years of education in Indonesia : rising enrolment and flat learning profiles. *Centre for Education Economics CIC*.
- Bedir, H. (2019). Pre-service ELT Teachers' Beliefs and Perceptions on 21st Century Learning and Innovation Skills (4Cs). *Dil ve Dillilimi Çalışmaları Dergisi*, 15(1), 231-246.  
<https://doi.org/10.17263/jlls.547718>
- Fleming, G. (2019). *5 Steps to Writing a Position Paper*.  
<https://www.thoughtco.com/how-to-write-a-position-paper-1857251>
- Hairston, M. (1982). *A Contemporary Rhetoric (3rd ed.)*. Houghton Mifflin.
- Hewi, L., & Shaleh, M. (2020). Refleksi Hasil PISA (The Programme For International Student Assesment): Upaya Perbaikan Bertumpu Pada Pendidikan Anak Usia Dini). *Jurnal Golden Age*, 4(01), 30-41.  
<https://doi.org/10.29408/jga.v4i01.2018>
- indozone.id. (2020, January). *Pengamat Pendidikan: Kurikulum Indonesia Terlalu Berat dan Kaku*.
- OECD(a). (2018). The Future of Education and Skills: Education 2030. *OECD Education Working Papers*, 1-23.
- OECD. (2015). *PISA 2015 Assessment and Analytical Framework*.
- OECD. (2019). *Indonesia. Program for international student assessment (PISA) Resul from PISA 2018*.
- Pritchett, L. (2013). The Rebirth of Education: Schooling Ain't Learning. In *Center for Global development* (Vol. 123, Issue 1). CGD Books.

- Rizal, A. (2018). *Indonesia Darurat Matematika!*
- Schleicher, A. (2019). *PISA 2018: Insights and Interpretations*. OECD Publishing.
- Sjøberg, S. (2018). The power and paradoxes of PISA: Should Inquiry-Based Science Education be sacrificed to climb on the rankings? *Nordic Studies in Science Education*, 14(2), 186–202. <https://doi.org/10.5617/nordina.6185>
- Suprpto, N. (2016). What should educational reform in Indonesia look like? - Learning from the PISA science scores of East-Asian countries and Singapore. *Asia-Pacific Forum on Science Learning and Teaching*, 17(2).
- World Economic Forum. (2020). The Future of Jobs Report 2020 | World Economic Forum. *The Future of Jobs Report, October 2020*, 1163.