#### **Research Article**

# Improving the Quality of Education Through the Implementation of Cambridge Curriculum: Examining the Advantages, Problems, and Optimization Efforts at SMPI Al Abidin Surakarta

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#### Abstract.

In Indonesia, many schools are beginning to implement international curricula such as the Cambridge curriculum in an effort to improve school quality, This study aims to review the advantages of the implementation of the Cambridge curriculum at SMPI Al Abidin Surakarta and find out the obstacles it faces and the solutions it can find. This research uses a qualitative approach using interview techniques, observation, and documentation as data collection tools. The results indicate that the implementation of the Cambridge curriculum can improve the English language skills of both teachers and students. In addition, students have a deeper understanding of mathematical concepts because the learning approach encourages conceptual understanding before applying procedures or formulas. However, there are also difficulties in the implementation of this curriculum, especially since the language of instruction is English and not all students are proficient. To overcome these difficulties, teachers can provide additional support to strengthen students' vocabulary or emphasize explanations in Indonesian.

Keywords: Cambridge curriculum, advantages, problems

## **1. INTRODUCTION**

This relentless effort to improve the quality of education is realized in the form of curriculum changes. These efforts are made in order to create future generations with character, who know the identity of their nation and create superior students, able to compete in the international world [1]. The existence of an international curriculum that is included in the national curriculum affects student success so that it is hoped that education will not only produce a generation that can compete nationally but also compete internationally. This is indicated by the government's support for international standard schools. Several years ago, the government issued a policy related to International

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Standard Schools (SBI) as stipulated in Law Number 20 of 2003 Article 50 paragraph 3 concerning the National Education System, although in 2013 the regulation was dissolved based on the decision of the Constitutional Court so that the implementation of the international curriculum did not have a clear legal umbrella [2]. Even so, some schools continue to implement learning with an integrated approach to the International and National curriculum as an effort to improve school quality and to prepare students for global competition so that in the future students can survive wherever they are and make education in Indonesia more qualified.

In Indonesia, many schools have implemented curriculum integration, namely the national curriculum and the international curriculum. One international curriculum that is widely used in Indonesian schools is the Cambridge curriculum. The Cambridge curriculum is an international curriculum developed by a team from Cambridge University and has been adopted by more than 10,000 schools in more than 160 countries, including Indonesia [3]. The Cambridge curriculum focuses on students' understanding, knowledge and critical thinking skills involving mental strategies, and problem-based learning and uses a student centered learning approach that aims to make students active in learning [1]. Thus, it can be said that the Cambridge curriculum is one of the curricula in the world that is included in the favorite category. This can be seen from the number of schools that use the Cambridge curriculum, both public schools and Islamic-based schools [4].

One of the Islamic schools in Indonesia that has implemented this cambride curriculum is AI Abidin Islamic Junior High School Surakarta. AI Abidin Islamic Junior High School integrates several curricula that can be in line with the breath of modernity and is characterized by Islam. Not only that, he said, the school also provides learning values that are oriented towards globally competitive graduates. Since its opening in 2010, the enthusiasm of the community for the al- Abidin Islamic Junior High School has increased. This was accompanied by the growing number of students registered by parents at the school. To date, the school is considered to continue to develop following the future needs of students who will be increasingly competitive [5].

Some previous studies state that the Cambridge curriculum provides learning experiences for students in accordance with international qualifications where schools have flexibility in the process of implementing the Cambridge curriculum in accordance with the learning objectives at school [3]. [6] stated that the benefits of implementing the Cambridge curriculum are that students get an international curriculum with global knowledge, the complexity of critical and creative thinking, and improved language skills. [7] also stated that the Cambridge curriculum has a major influence on the success of students in the implementation of the curriculum, there are clear curriculum materials and frameworks and their implementation goes into process standards by carrying out a carefully planned so that it is hoped that this curriculum can produce quality graduates who are recognized internationally.

This research is unique because SMPI AI Abidin Surakarta is the only Islamic school in Surakarta that implements the Cambridge curriculum, so this school is a school with various educational programs in it both science and technology-based and Islamic education programs. This is indicated by several.Islamic programs including Quran Camp, tasmi' routine, mabit Quran, and others. However, in addition to implementing the integrated curriculum, there must be difficulties, obstacles or problems faced by both the school, teachers as educators and students.

Therefore, researchers are very interested in conducting research related to the implementation of the Cambridge curriculum at Al Abidin Islamic Junior High School, especially in the sub-discussion of advantages or advantages and problems and efforts to overcome these problems at Al Abidin Junior High School Surakarta.

### 2. METHOD

This research uses a descriptive qualitative research method approach. Existing data collection is done from the results that have been done with teachers at Al Abidin Islamic Junior High School Surakarta by interview and documentation methods. The interview method was conducted to explore data about the implementation of the Cambridge curriculum at the school. Documentation is done by looking at learning tools in the form of teacher and student textbooks used in learning, in this study in the form of teacher and student textbooks in mathematics subjects in grade 7 which aims to see the composition of the subject matter and the style of presentation of mathematics material used in mathematics learning. Interviews were conducted with the vice principal for curriculum and grade 7 mathematics teachers with the aim of exploring more deeply related to the implementation of the cambridge curriculum at SMP Islam Al Abidin Surakarta, especially related to the advantages or advantages of the implementation of the cambridge curriculum as well as problems and efforts made to overcome these problems.

### **3. RESULTS AND DISCUSSIONS**

The results of interviews with the head of curriculum and teachers obtained information that Al Abidin Islamic Junior High School is the only Islamic school in Surakarta that implements Cambridge Assessment International Education or referred to as the Cambridge Curriculum. Al Abidin Islamic Junior High School Surakarta is one of the units of the AI Abidin Foundation which was established as a form of concern for the continuation of education from KB-TKII AI Abidin and SDII AI Abidin which has long gained the trust of the community. Al Abidin Islamic Junior High School seeks learning by prioritizing a child exploration process approach that synergizes Islamic values and science and technology with foreign language skills. Al Abidin Islamic Junior High School is a secondary school under the auspices of the Al Abidin Foundation which was built in 2010. At first, Al Abidin Islamic Junior High School only implemented the national curriculum like ordinary schools in general. But in 2015, it began to strive to integrate one of the international curricula, namely the Cambridge curriculum. One of these efforts is to become a sister school or partnership school from one of the schools in Malang. Until over time, in 2017, Al Abidin Islamic Junior High School could become the center of the implementation of the cambridge curriculum in Surakarta. From the results of an interview with the head of curriculum at SMP Islam AI Abdin Surakarta, he expressed his views regarding the cambridge curriculum. According to him, the Cambridge curriculum is a curriculum that has been widely used in many countries in the world where the Cambridde curriculum not only provides learning that is analytical but also holistic, so related to character, health, and so on are also considered in the cambridge curriculum, and in the cambridge curriculum will increase student skills as a provision for life skills to face life in the future. This is also the reason why Al Abidin Islamic Junior High School chose the Cambridge curriculum as an international curriculum that can be integrated with the national curriculum.

Mrs. Rina as Waka Curriculum of Al Abidin Islamic Junior High School revealed:

"We chose the Cambridge curriculum, because it is very adaptive, to be applied in schools,

besides that, it builds character and skills for students"

This is in accordance with the explanation conveyed by [7] in his research that the Cambridge curriculum is an adaptive, comprehensive, and integrated curriculum with science. In Islamic educational institutions, both in schools and abroad, it is assumed that it will be able to provide something useful and fulfill the desired goals. In addition, Mrs

Wela Ardha, a mathematics teacher, explained that the school chose the cambridge curriculum because the Cambridge curriculum is renowned for its high academic standards and is internationally recognized. Choosing this curriculum can provide assurance that the education provided to students is equivalent to global standards, preparing them for further study or careers at the international level. This is in line with the expression conveyed by [7] that one of the benefits of implementing the Cambridge program is that students get an international curriculum with global knowledge, the complexity of critical and creative thinking patterns, the language skills of students increase.

In the implementation of the learning process, there are differences between learning using the cambridge curriculum and the national curriculum, as explained by the waka curriculum of SMPI Islam AI Abidin, Mrs. Rina

"After we implement the cambridge curriculum at school, the difference is that the learning is very varied, so yes, it sharpens students' analysis with various activities and thinking power that increases students' problem solving and it will be more beneficial for students."

Based on his statement, we can see that the difference lies in a more varied learning process. In addition, learning using the Cambridge curriculum can also train students' thinking so that it can improve problem-solving, which is very useful in students' daily lives and is also included in one of the learning objectives of mathematics, according to the Ministry of Education and Culture 2013. The varied learning in question is in terms of student learning activities and also the practice questions given with various methods in it. Implementing mathematics learning that follows the Cambridge Curriculum standards requires a structured approach and focuses on developing students' conceptual understanding and problem-solving skills (Interview with Mathematics Teacher). Therefore, the Cambridge curriculum often emphasizes conceptual and problem-solving-based approaches, whereas the national curriculum tends to focus more on mastering algorithms and formulas, with an emphasis on procedural learning. As also revealed by [8] in their research that in the fields of Science and Mathematics, the Cambridge curriculum provides basic formulas and students are more focused on learning problem solving, reasoning, logic and analysis, in contrast to the national curriculum which emphasizes memorization of formulas and calculations with complicated numbers. The Cambridge curriculum emphasizes logical thinking rather than memorization and counting, helping students to think critically and deepen but not complicate even though it uses English. It was further explained from the results of the interview that in integrating the Cambridge curriculum with the existing curriculum in Indonesia, usually the teachers in the Subject Teacher Conference (MGMP) gather, then conduct a review of the curriculum used by Cambridge, what is in the national curriculum, then discuss it to be integrated and this will be easier because the Cambridge curriculum is an adaptive curriculum so that the adjustment is not too much. The review of the curriculum begins with the framework, leaning objectives, materials, and delivery methods/activities in the classroom. In addition, teachers also need to have an in-depth understanding of the Cambridge curriculum document, including learning objectives, curriculum structure, and recommended teaching approaches. Schools also need to provide training and professional development include independent workshops and also specifically for teachers teaching cambridge subjects such as Mathematics, English and Science, teachers will be involved in special additional workshops from cambridge. This special training is carried out every week by the SMP Islam Al Abidin Surakarta.

In addition, the preparations made by the school are also of course first, related to curriculum analysis. This curriculum analysis includes what is the purpose of the Cambridge curriculum. The second preparation is also related to improving the English language skills of teachers or students. This is because in the implementation of the learning process, both cambridge subjects and others are delivered using English, so that both teachers and students must be able to have the ability to speak English. So in this case, teachers need special time to prepare the material to be delivered and how to deliver it.

Some advantages or advantages that can be felt by the Al Abidin Islamic Junior High School after implementing an integrated curriculum between the Cambridge curriculum and the national curriculum include first, in terms of language. This is because in the Cambridge curriculum, the delivery of learning used in the classroom is of course in English, so that the English language skills of teachers and students can be much more improved. This is supported by the results of research conducted by [4] which revealed that learning using English and textbooks directly from Cambridge can further hone the ability to use English, both in terms of speaking and writing. Students will gain a lot of insight and knowledge about the outside world by reading Cambridge books [8]. Second, students' skills in learning also increase. For example, the ability to analyze critical thinking because the learning pattern used stimulates students to think critically. In addition, the Cambridge curriculum also provides access to quality learning resources, including textbooks, online teaching materials and other teaching aids. This helps teachers to provide a more varied and interesting learning experience for students. In addition to critical thinking analysis skills, students also tend to have a deeper understanding of mathematical concepts due to the learning approach that encourages conceptual understanding before applying procedures or formulas. Students are given the opportunity to explore and apply mathematical concepts in a variety of contexts and situations. The Cambridge curriculum supports students' preparation to compete in a global context by introducing them to recognized international standards.

In implementing a policy, especially in implementing the international curriculum, there must be various difficulties or obstacles in it, both experienced by teachers as educators or students as the object being educated. Some of the obstacles obtained by Islamic Junior High School Al Abidin Surakarta include language-related because learning is delivered using English. This was also revealed by the mathematics teacher at Al Abidin Islamic Junior High School Surakarta that the obstacles felt especially in the implementation of the learning process in the classroom are in the use of English as the language of instruction in the learning process. Because we use the Cambridge Curriculum, we are required to always use English. However, in its application, not all students are proficient, so it is necessary to emphasize vocabulary. The students also feel this way. They are constrained in terms of language understanding and the complexity of the material. In addition, especially in the process of learning mathematics, the obstacles that arise are related to conceptual understanding. Because it emphasizes conceptual understanding of mathematics before the application of procedures, students often face difficulties in understanding mathematical concepts well. In addition, by emphasizing the development of problem-solving skills, students may have difficulty applying mathematical concepts in different contexts. On the other hand, in the form of lesson plan or syllabus preparation, the Cambridge curriculum has a different structure and approach from the national or independent curriculum. Significant adjustments need to be made in designing lesson plans and compiling syllabi to suit the approach and learning objectives of the Cambridge Curriculum.

To overcome the above obstacles or difficulties, Al Abidin Islamic Junior High School Surakarta takes several steps. Among the steps taken is to provide additional support for language comprehension such as vocabulary games to help students increase vocabulary. In addition, providing specific feedback related to language use and material understanding, so that students can continue to improve their abilities. It is also revealed by the waka curriculum of Al Abidin Islamic Junior High School that in language constraints, teachers usually apply various strategies, such as conveying some specific vocabulary first, emphasizing explanations in Indonesian and English exercises or tests. Teachers also often suggest to deepen math vocabulary in English and practice more often independently to hone students' reasoning and problem-solving skills. Not only students, teachers who teach cambridge subjects also attend English language training and coordinate regularly with the MGMP team to implement the Cambridge curriculum properly. This is in line with what was conveyed by [9] that one of the solutions to the implementation of the Integration curriculum (national and international curriculum) is by conducting special English course training for educators. In the implementation of the learning process, the Cambridge curriculum also provides textbooks that are equipped with online access so that students can open books without carrying them physically. Assignments and practice questions can also be given by the teacher as an additional feature. As this was also revealed by the mathematics teacher at Al Abidin Islamic Junior High School, that implementing learning using the Cambridge curriculum is easier because the sources available for learning are numerous and varied. The textbooks used in implementing the Cambridge curriculum are also different from those used in the national curriculum. The content in Cambridge books covers various aspects, such as learning approaches, curriculum structure, and level of material complexity.

The subject teacher of Al Abidin Islamic Junior High School revealed:

"There are many factors to assess the complexity of the curriculum. It might be difficult if I don't know English. But in terms of content, I think the cambridge curriculum is easier because it emphasizes the way students think coherently to find concepts, not just memorizing formulas."

For schools or educational institutions that will implement the Cambridge curriculum, they can first study and review, develop support programs, and carry out language training or teaching methods for teachers so that they can hone students' curiosity and analysis. It would be better to prepare for improving the quality of teaching and learning in schools as well as improving facilities and infrastructure properly. The facilities and infrastructure can be in the form of audio, wifi as well as tools and materials in the laboratory provided by the school.

From the results of interviews with the head of curriculum and mathematics teachers at SMP Islam AI Abidin Surakarta, they revealed that the Cambridge curriculum standards can improve the quality of education in Indonesia because the Cambridge curriculum is based on widely recognized international standards. Introducing this

standard to several schools in Indonesia can improve students' preparation to compete at the global level, both in the context of further education and in global competition. The implementation of the Cambridge curriculum in Indonesia can help build a generation of Indonesians with good skills and supported by noble character as well as deeper knowledge.

# **4. CONCLUSION**

In the conclusion, you should restate the thesis and show how it has been developed through the body of the paper. Briefly summarize the key arguments made in the body, showing how each of them contributes to proving your thesis.

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