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The Effectiveness of Indonesian Education Curriculum Reform on the Quality of Processes in Learning

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Abstract: UU no. 20 of 2003 aims to develop the potential of students in spiritual strength, noble character, intelligence, self-control, and the skills needed. To achieve this national education goal, the Government always seeks to improve the quality of education through educational curriculum reform, with the aim of improving and developing the previous curriculum. This can be seen from the frequent curriculum changes in Indonesia since 1947, 1964, 1968, 1973, 1975, 1984, 1994, 1997, 2004, 2006, 2013 curriculum, until now the era of the industrial revolution 5.0 is known as the independent curriculum. However, curriculum reform often creates problems among the school community and the general public. The problems that arise are how it is implemented and the reasons behind the curriculum change, and whether curriculum reform has an effect on the quality of learning? The quality of education and learning must be aligned with the process standards in article (1) of Government Regulation No. 19 of 2005 concerning National Standards Education that must be developed in the implementation of learning in educational units to achieve competence. To achieve learning competencies in the 5.0 industrial revolution era, 21st century skills are needed, namely critical thinking skills, communication skills. creativity and innovation, capable of collaboration. In addition, so that learning objectives can improve the quality of learning, attitudes and abilities must be possessed: mastering the current curriculum and learning tools, mastering material in the field of study, mastering assessment methods and techniques, commitment or love of the teacher to the task, and discipline.

Keywords: Curriculum; Education; Indonesia Quality Learning.

Introduction

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students effectively develop their potential to have religious spiritual strength, intelligence, noble character, self-control, and the skills needed by them, society and the state (UU No. 20 of 2003). The government through the Ministry of Education and Culture (Kemendikbud) always reforms the curriculum as a curriculum revision from the previous curriculum. Curriculum reform is a natural cycle that occurs in the world of education. Indonesia often experiences curriculum reform, starting from the 1947, 1964, 1968, 1973, 1975, 1984, 1994, 1997

curriculum, KBK (2004), KTSP (2006), 2013 curriculum, 2013 revised curriculum, until now it has been rumored to change into an independent learning curriculum. The independent curriculum is designed to answer the hopes and challenges of the 21st century, where the development of science and information technology is now digitally based. This is marked by major changes in every professional activity related to digital or hybrid-based technology. Therefore, this change has an impact on the process of providing human resources (HR), which of course must be able to face the challenges faced in the digital era. To provide ready-to-use human resources in the digital era, the government is trying to

reform the curriculum with the aim of improving the previous curriculum (Arifin, 2009).

Basically, education reform is the government's effort to develop education. Because in every curriculum reform there is always an effort to improve the education sector. That is, the new curriculum has the task of updating, developing, and improving the existing curriculum. However, curriculum reform often creates problems among the community, both the school community and the general public (Alhamuddin, 2014).

The problem with changing the curriculum is how it is implemented and the reasons behind changing the curriculum. Curriculum reform that has occurred has more or less changed the system or order of learning activities in schools. because the curriculum is the field that most directly influences educational outcomes (Muhammedi, 2016). The curriculum can also function as a medium to achieve goals as well as guidelines in the implementation of learning at all types of educational levels (Hapsari, 2014).

The quality of education and learning must be aligned with existing process standards, as stated in article (1) of Government Regulation No. 19 of 2005 concerning National Education standards. One of the standards that must be developed is process standards, namely those related to the implementation of learning in educational units to achieve competency. This process standard contains the minimum criteria for the learning process in primary and secondary education units. Process standards include planning the learning process, implementing the learning process, evaluating learning outcomes, and monitoring the learning process for the implementation of an effective and efficient learning process (Morelent & Syofiani, 2015).

According to Permendiknas no 41 of 2007 in Setyosari (2016). However, the problem is that with curriculum reform that occurs too often, can the quality of each learning process be carried out properly in schools? Curriculum objectives can be achieved if the process of teaching and learning activities goes well. However, the curriculum will not be optimally achieved if the learning process is carried out as it should be with various obstacles (Munajim et al., 2020).

Based on this description, researchers are trying to conduct research that aims to see the effect of reform of the Indonesian education curriculum on the quality of learning. Whereas future education needs to be designed to answer the expectations and challenges of the changes that occur. Where the education system that is built must be sustainable from preschool education to higher education so that appropriate educational curriculum solutions can be found (Muhammedi, 2016).

Important aspects of history subject matter, in which the curriculum must emphasize: the importance of learning history as a means of national education; as a fundamental means of nation-building; instilling national consciousness and Indonesianhood as a means of instilling the spirit of nationalism; historical perspective of the past-present-future as a means of instilling the spirit of nationalism; consciousness during the independence revolution, forming a spirit of nationalism and people's solidarity in defending the Republic of Indonesia; experience of the nation's history as important knowledge in the implementation of national education; the need for government recognition of the importance of historical education as a means to shape national identity and integrity; and the formulation of history as a subject that instills knowledge and values of the processes of change and development of Indonesian society and the world from the past to the present. Therefore, learning history must be able to encourage students to think critically and analytically in utilizing knowledge of the past to understand present and future life; develop intellectual abilities and skills to understand change and sustainability processes; and serves as a means to instill awareness of changes in people's lives through the dimension of time (Aprilia, 2020).

Method

In this article, the researcher used a literature study by concluding some material sourced from journals, books, other sources related to the science of public relations and measuring the qualitative data obtained from the technique of giving assignments to students in observing and conducting interviews to what extent the approach was applied by teachers in schools to measure the quality of learning as seen from the level of achievement of learning objectives and effectiveness. According to Arikunto (2013), the sample is part or representative of the population to be studied, if the subjects of the study are less than 100 people it is better to take all of them, so that the research is population research, then if the total population is more than 100 people then 10-15 can be taken % or 20-25% or

Result and Discussion

Effective learning can be defined as learning that succeeds in achieving the learning objectives of students as expected by the teacher. In order for an effective learning process to occur, it is necessary to focus the attention of students. This means that learning is centered on students (learning center) not teacher centered (teacher center) and knowledge is seen as a social construct that can be carried out through peer interaction through learning and collaboration activities.

The results of student assignments from interviews with several teachers in the city of Medan reveal that the teacher has the task of: (1) motivating and facilitating the learning process so that it is easy for students to learn. To facilitate students in learning, the teacher has the task of developing the main tasks of educating and teaching. Where this main task includes designing, implementing and assessing. The task of designing is carried out before the implementation of learning is called RPP. Furthermore, the teacher carries out all activities according to the design starting from the initial activities, core activities and closing activities and assesses the learning activities both the process and the results.

These activities are said to be in accordance with process standards, so that effective learning is obtained. (2) educate and teach. The figure of a teacher who educates is very much needed, to mature students' intellectuals, manage emotions maturely, develop moral or ethical abilities, be able to judge aesthetics, have a social life, and other skills. While teaching tasks, the teacher develops 3 main aspects, namely developing students' cognitive, affective and psychomotor.

According to Setyosari (2016) the task of educating and teaching is a learning event, which includes attracting attention, conveying the main objectives of learning, arousing something that is already owned by students, presenting teaching materials or learning materials, providing guided exercises, displaying performance, providing feedback feedback, assess performance and improve retention and transfer of material. (3) assessing all activities that have been prepared in the RPP whether they are carried out with a good process and good results.

Effective learning will produce quality learning (Alam, 2022; Simanjuntak et al., 2022). The importance of the quality of learning to be improved, the government through the Ministry of Education and Culture (Kemendikbud) is always trying to reform the curriculum as a revision of the curriculum from the previous curriculum, with the aim of developing the curriculum so that it is able to be a solution to the challenges faced according to the times, one of the educational curriculum reforms that has been currently running is the industrial revolution curriculum 5.0. The concept of the 5.0 industrial revolution is a fundamental concept that can change the way we live, the way we work and relate to others. One of the unique characteristics of Industry 5.0 is the application of artificial intelligence.

Curriculum development in the 5.0 industrial revolution era was very influential in the world of education. Where the curriculum emphasizes developing soft skills and transversal skills, as well as invisible skills that are useful in many work situations

such as interpersonal skills, living together, the ability to become citizens who think globally, and media and information literacy.

Especially during the Covid 19 pandemic, the quality of education, especially learning, has greatly deteriorated in effectiveness due to the unpreparedness of teachers, schools, students and parents of students in dealing with remote learning. This unpreparedness is influenced by the lack of skills of teachers, schools, students and parents in carrying out distance learning. The curriculum is always changing and the changes are always influenced by the underlying factors. The purpose of education can change fundamentally when a country moves from being a colonized country to being an independent country. By itself the curriculum must undergo a thorough change (Tampubolon et al., 2022).

The government sees that the poor quality of education will affect the future of Indonesia's young generation. And the government sees the rapid acceleration of the world of technology and information controlling all regions of Indonesia except for the deepest, outermost remote areas (3T). Therefore, the government is trying to improve learning through curriculum reform known as the 5.0 industrial revolution era curriculum or known as independence (Harun, 2022).

In order for the implementation of education in an institution to be organized and have clear directions as well as well coordinated and systematic, it is necessary to have curriculum management in order to achieve the desired educational goals. There is a need for theoretical and practical studies in managing the curriculum so that it can be in line with the development of human culture and also the progress of science and technology. In dealing with school problems, especially in the learning process, a school principal's policy is needed to involve parties in institutions such as educators, school committees, and all parties involved in managing the curriculum.

The role of the curriculum is very important in education (Muleya, 2020). There are three important roles in the curriculum, namely conservative, critical or evaluative, and creative. These three roles need to be implemented in a balanced way. Besides having a role, the curriculum also has several functions, namely adjustment, integration, differentiation, preparation, selection, and diagnostics. Some of these functions are fully implemented by the curriculum. This function affects the growth and development of students, in line with the educational goals set by related educational institutions (Herlina, 2018; Simanjuntak, 2020).

Curriculum reform is expected to be a solution for education, especially students in facing the challenges of distance learning. Where this revolutionary era is closely

related to 21st Century skills related to rapidly developing technological advances.

Trilling & Fadel (2009) argue that 21st century skills consist of three main types of skills, namely: life and career skills, learning and innovation skills, and information media and technology skills. Certainly these skills can be a guide in learning in the 5.0 era so that the learning system can be in line with the concept of revolution 5.0. In line with what was conceptualized by the Director General of Primary and Secondary Education of the Ministry of Education and Culture (2017), skills in the 21st century refer to four types of skills, namely: (1) critical thinking and problem solving skills (Critical Thinking and Problem Solving Skills). Where students can think independently, be disciplined, monitor themselves, and can improve their own processes. (2) communication skills (Communication Skills). These communication skills in learning such as how students use their abilities to express their ideas, how they use spoken language related to the attitude they show, how their attitude is in listening to other people's opinions and the use of multiple languages. (3) creativity and innovation (Creativity and Innovation). Students can be open and able to express creative ideas conceptually and factually. As well as being able to adapt and contribute positively. (4) collaboration. namely being able to work together, be responsible, respect and empathize and be able to compromise with others.

According to Sugiana (2018), in organizing the curriculum, it must be prepared as optimally as possible to achieve the expected educational goals. Several things must be considered in organizing the curriculum, namely, seeing the needs, interests, and talents of different students.

The scope and systematics of learning materials is one of the factors that need attention in a curriculum. Each curriculum pattern has a different scope of subject matter. In addition to the scope of the subject matter, how the sequence of the material must be presented in the curriculum also needs to be considered in the curriculum organization. Second, the organization of the curriculum, the continuity of the curriculum, especially with regard to the substance of the material being studied by students, needs to be considered. The spiral approach is one of the efforts to apply this factor. That is, the material received by students is getting deeper and deeper which is developed based on the breadth of the study. Third, in the curriculum organization, the balance of learning materials needs to be considered as well. The more dynamic changes and developments in science, socio-culture, and the economy affect the dimensions of the curriculum. Fourth, the allocation of time needed in the curriculum must be taken into consideration in the process of organizing the curriculum (Mukhlasin & Wibowo, 2018; Renzulli, 2023; Soviany et al., 2022).

Besides that, in order for learning objectives to be achieved effectively so as to improve the quality of learning, a learner must have the attitude and ability to: (1) master the current curriculum and learning tools. (2) mastery of the material in the field of study. (3) mastery of assessment methods and techniques. (4) the teacher's commitment or love for the task. (5) Discipline. Discipline here is not prohibiting freedom or holding a suppression. However, giving freedom within the limits of the ability of students. Discipline can help students realize what is expected and what is not expected of them and can help them achieve what is expected of them (Tabroni, 2015).

According to Musyarapah (2014), designing a curriculum is drafting or compiling a model in accordance with the vision and mission of an educational institution. The context of curriculum development specifically is to be able to meet individual needs and the needs of the institution itself. In analyzing needs, there are several stages must be carried out, including: making decisions regarding need assessment, obtaining information, and using information.

According to Rosmana et al. (2022) "Narrowly, the curriculum can be interpreted as a number of subjects that must be followed/taken by students to be able to complete their education in certain educational institutions." Efforts to give learning experiences for students can take place in the classroom or outside the classroom, whether designed in writing or not, as long as they are aimed at forming quality graduates.

To achieve the objectives of the learning curriculum, training is needed as a provision for teachers and the school on how to apply it in learning, so that teachers have the ability to understand skills in the 21st century (suggestions from several teachers), which academically includes four main components, namely (1) objectives education to be achieved. (2) knowledge, knowledge, data, activities and experiences from everywhere. (3) Methods and methods of assessment are used to measure and assess the results of the educational process designed in the curriculum. So that the quality of learning and education is in line with process standards related to the implementation of learning in educational units to achieve competence according to article (1) of Government Regulation No. 19 of 2005 concerning National Education Standards (Tilaar, 2000).

Conclusion

Based on the results of research on the idea of studying literature from various references and interviews with several teachers, the hope of curriculum reform is that the new curriculum will not suffer the same fate as the previous curricula. However, it is capable of influencing the improvement of the quality of learning, so as to be able to provide insight into changes in the paradigm of thinking for those who use it.

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References

- Alam, A. (2022). Investigating sustainable education and positive psychology interventions in schools towards achievement of sustainable happiness and wellbeing for 21st century pedagogy and curriculum. *ECS Transactions*, 107(1), 19481. https://doi.org/10.1149/10701.19481ecst
- Alhamuddin, A. (2014). Sejarah Kurikulum di Indonesia (Studi Analisis Kebijakan Pengembangan Kurikulum). *Nur El-Islam*, 1(2), 48–58. https://www.neliti.com/publications/226468/sej arah-kurikulum-di-indonesia-studi-analisis-kebijakan-pengembangan-kurikulum#cite
- Aprilia, W. (2020). Organisasi dan Desain Pengembangan Kurikulum. *Islamika*, 2(2), 208–226. https://doi.org/10.36088/islamika.v2i2.711
- Arifin, Z. (2009). *Evaluasi pembelajaran* (Vol. 8). Bandung: Remaja Rosdakarya.
- Arikunto, S. (2013). *Prosedur Penelitian: suatu pendekatan praktik*. PT Rineka Cipta.
- Hapsari, F. (2014). Efektifitas Perubahan Kurikulum Terhadap Kegiatan Pembelajaran Di Sekolah (Studi Kasus Pada Sdn 03 Pagi Ciracas). Research and Development Journal of Education, 1(1). https://journal.lppmunindra.ac.id/index.php/RD JE/article/download/1376/1098
- Harun, S. (2022). Pembelajaran di era 5.0. *PROSIDING SEMINAR NASIONAL PENDIDIKAN DASAR*. http://ejurnal.pps.ung.ac.id/index.php/PSNPD/article/view/1074
- Herlina, H. (2018). Urgensi Desain Kurikulum dalam Upaya Memajukan Pendidikan Di Indonesia. *Ngabari: Jurnal Studi Islam Dan Sosial, 11*(1), 1–15. https://scholar.google.com/citations?view_op=view_citation&hl=id&user=kj3j7dgAAAAJ&citation_for_view=kj3j7dgAAAAJ:PVgj2kMGcgYC
- Morelent, Y., & Syofiani. (2015). Pengaruh Penerapan Kurikulum 2013 Terhadap Pembentukan Karakter Siswa Sekolah Dasar Negeri 05 Percobaan Pintu Kabun Bukittinggi. *Jurnal Gramatika: Jurnal Penelitian Pendidikan Bahasa Dan Sastra Indonesia*,

- 1(2), 141–152. https://doi.org/10.22202/jg.2015.v1i2.1234
- Muhammedi, M. (2016). Perubahan Kurikulum Di Indonesia: Studi kritis tentang upaya menemukan Kurikulum Pendidikan islam yang ideal. *Jurnal Raudhah*, 4(1). https://doi.org/10.30829/raudhah.v4i1.61
- Mukhlasin, A., & Wibowo, R. (2018).Desain Pengembangan Kurikulum Integratif dan Implementasinya dalam Pembelajaran. Iurnal Tawadhu, 2(1),364-380. https://ejournal.iaiig.ac.id/index.php/TWD/artic le/view/71
- Muleya, G. (2020). Curriculum policy and practice of civic education in Zambia: A reflective perspective. *The Palgrave Handbook of Citizenship and Education*, 185–194. 10.1007/978-3-319-67828-3 53
- Munajim, A., Barnawi, B., & Fikriyah, F. (2020). Pengembangan Kurikulum Pembelajaran di masa darurat. *DWIJA CENDEKIA: Jurnal Riset Pedagogik*, 4(2), 285–291. https://doi.org/10.20961/jdc.v4i2.45288.
- Musyarapah, M. (2014). Manajemen Proses Pengembangan Kurikulum (Need Assesment dan Pengembangan Desain Kurikulum). *AL-RISALAH*, 10(2), 227–240. https://jurnal.stairakhaamuntai.ac.id/index.php/alris/article/view/23
- Renzulli, J. (2023). The multiple menu model: A practical guide for developing differentiated curriculum. Taylor \& Francis.
- Rosmana, P. S., Iskandar, S., Fauziah, H., Azzifah, N., & Khamelia, W. (2022). Kebebasan dalam kurikulum prototype. *AS-SABIQUN*, 4(1), 115–131. https://doi.org/10.36088/assabiqun.v4i1.1683
- Setyosari, H. P. (2016). *Metode penelitian pendidikan \& pengembangan*. Prenada Media.
- Simanjuntak, M. B. (2020). The effects of integration between kurikulum 2013 and cambridge curriculum in English (Study case taken from saint peter's junior high school). *Journal Of Advanced English Studies*, 3(1), 50–59. https://doi.org/10.47354/jaes.v3i1.77
- Simanjuntak, M. B., Suseno, M., Setiadi, S., Lustyantie, N., & Barus, I. R. G. R. G. (2022). Integration of Curricula (Curriculum 2013 and Cambridge Curriculum for Junior High School Level in Three Subjects) in Pandemic Situation. *Ideas: Jurnal Pendidikan, Sosial, Dan Budaya, 8*(1), 77–86. https://jurnal.ideaspublishing.co.id/index.php/ideas/article/view/615
- Soviany, P., Ionescu, R. T., Rota, P., & Sebe, N. (2022). Curriculum learning: A survey. *International Journal of Computer Vision*, 130(6), 1526–1565.
- Sugiana, A. (2018). Proses pengembangan organisasi kurikulum dalam meningkatkan pendidikan di

- indonesia. *PEDAGOGIK: Jurnal Pendidikan*, 5(2), 257–273. https://doi.org/10.33650/pjp.v5i2.392
- Tabroni, T. (2015). Upaya Menyiapkan Pendidikan Yang Berkualitas.
 - https://demo.dspacedirect.org/server/api/core/bitstreams/62a7c050-db0e-41ff-adea-1d0d2e5d39a2/content
- Tampubolon, R., Gulo, Y., & Nababan, R. (2022).

 Pengaruh Reformasi Kurikulum Pendidikan Indonesia Tehadap Kualitas Pembelajaran. *Jurnal Darma Agung*, 30(2), 389–395. https://doi.org/10.46930/ojsuda.v30i2.1748
- Tilaar, H. A. R. (2000). *Paradigma baru pendidikan nasional*. Rineka Cipta.
- Trilling, B., & Fadel, C. (2009). 21st century skills: Learning for life in our times. John Wiley \& Sons.