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Indonesian education: A future promise

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ABSTRACT

Technological, social, and environmental changes are occurring globally. The disruption of technology will impact all sectors of human life. Sociocultural changes occur in the demographics and socioeconomics of the world population. During this chaotic condition, the Indonesian nation, with a large population and natural resources, must inevitably adapt to the global environment. Statistics Center Agency and World Bank data show that Indonesian student enrollment rates are rising, but preschool and tertiary gaps remain. Despite rising student enrollment, Indonesian education remains in crisis. One of the backbones of the nation's civilization to face global competition is good and mature planning in the education sector that adapts to global demands. This paper reviews the future of Indonesian education based on the mapping between Ki Hadjar Dewantara's education model, the Indonesian education roadmap 2020-2015, the disrupted education model in 2020, The WEF Education 4.0 Framework, and the Future of the classroom model. This paper results in a future Indonesian education model framework to realize Indonesia's education vision for 2035.

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1. Introduction

The Covid 19 pandemic has driven such rapid structural changes [1]. The trend of change, into the bargain, occurs in the field of education with the implementation of distance learning at all levels of education [2]. Schools around the world are required to immediately adapt to digital systems to facilitate distance learning [3], [4]. Then, a number of schools and universities succumbed to financial pressure, one of which is because parents and students ask for waivers in tuition fees and encourage institutions to reduce tuition fees [5]. Systems at all levels of education in Indonesia also require adapting to these global changes. The education system is obliged to adjust to the nation's economy, a dynamic labor market depiction, socio-cultural and demographic changes of the nation, and the 2045 Indonesian Vision [6]. This can be explained as follows: (1) the superior human resources needed in the future cannot be established by scientific developments that are formed based on previous trends; (2) significant demographic changes occur with evidence of increasing middle income class; rapid urbanization; and increased population life expectancy; and (3) penetration of internet users in Indonesia is increased [7], therefore, Indonesian society becomes a digital literate society and encourages faster adoption of science and technology.

Overall student enrollment rates in Indonesia continue to increase; the remaining gaps exist in the preschool and tertiary levels based on data from Statistics Center Agency and the World Bank. However, despite the increasing student participation rate, education in Indonesia remains facing a serious problem. The problems faced by Indonesian education as mentioned in the Indonesian Education Roadmap 2020-2035 are as follows [8]; 1) Primary and secondary education: low ranking of PISA results for primary and secondary education, ineffective teaching methods, inadequate school infrastructure, inflexible and material-based curriculum, and inequality of government; 2) Higher education: low involvement of industry, stringent regulations and requirements, rigid curriculum, striking disparities in lecturer competence; 3) Gaps in government: regulatory boundaries and geographic limitations result in large inequality of learning outcomes and are still concentrated in Java; 4) The involvement of private sector investment in education is still low. Based on the problems faced by the Indonesian nation, future-oriented, sustainable, adaptable, and relevant to millennials planning and strategies are needed.

The behavior from generation to generation was greatly influenced by the Industrial Revolution from 1.0 to 4.0. For instance, the generation born between 1946-1964 (the baby boomer generation) has a completely different behavior from Generation Z who was born in the 1996-2010 era, and likewise will behave very differently from the Alpha Generation. Each generation has its own peculiarities in accordance with the technological developments that follow. It is described that Generation Z's behavior is to respect diversity, desire social change, like to share, and is target oriented. This should be the concern of every relevant stakeholder when planning and making educational strategies. Therefore, the products of educational policies, plans and strategies are not mistakenly targeted and are in accordance with the personality development of students. The nine Indonesian millennial behaviors as reported by Indonesiabaik.id are as follows [9]. (1) Internet addiction; Internet users in Indonesia are dominated by millennials with an average internet consumption of more than seven hours / day. (2) Easy to turn to another concern and interest, very low level of loyalty. (3) Thin wallet; a number of 59% millennials prefers cashless transactions. (4) Work smart and fast, adaptable, and work more effectively. (5) It can be anything; accustomed to multitasking able to do 2-3 jobs at once. (6) Vacation anytime, anywhere; 1 in 3 millennials in Indonesia vacation at least once a year. (7) Ignorant of politics; Millennials tend to be indifferent to politics and prefer movies, sports, and IT. (8) Like to share; Millennials are more concerned with social issues, love to share, and have high solidarity. (9) Must not have; for millennials, access is more important than ownership.

The nine millennial behaviors that have been mentioned can be used as an overview of how and what needs to be prepared carefully and in detail by all parties with an interest in education planning and strategy. The ultimate goal is to prepare outstanding students and become lifelong learners with global competencies based on a Pancasila characteristics. In the end, in accordance with global demands, the general description of national education listed in the Indonesian Education Roadmap 2020-2035, and the characteristics/behavior of the Indonesian millennial generation as subjects in national education planning is very interesting when it is reviewed about the suitability of policy directions between the Indonesian Education 2020-2035 roadmap with global demands and what are the characteristics of the future national education that is needed.

2. Method

This research employed a qualitative design with the type of documentation study approach. The data collection method was in the form of documentation by collecting documents and articles in scientific journals. The documents collected included (1) Ki Hadjar Dewantara's Education Model, (2) Indonesia's Education Roadmap 2020-2035, (3) Bernard Marr's article in Forbes magazine (Top Five Tech Trends That Will Disrupt Education in 2020), (4) The WEF Education 4.0 Framework, (5) The Future of the Classroom Model from Google for Education which is the result of research to conduct global analysis in the world of education, (6) scientific journal articles are reputable to support this paper. The data analysis technique was in the form of content analysis. Content analysis was carried out by mapping. The mapping process was carried out in stages with the following scheme (1) mapping and synchronization between Ki Hadjar Dewantara's Education Model and the Indonesian Education Roadmap; (2) mapping and synchronization between the 2020-2035 Indonesian Education Roadmap with the Disrupt Education Model in 2020, The WEF Education 4.0 Framework, and the Future of the Classroom Model from Google for Education. From the mapping process that has been carried out, an education model that has a distinctive Indonesian characteristic has been produced

which consists of principles, strategies, and implementation. Furthermore, it was compiled into a framework for Indonesia's future education model. The results of the mapping also illustrated whether there is a match between the Indonesian Education Roadmap 2020-2035 with the Disrupt Education Model in 2020, The WEF Education 4.0 Framework, and the Future of the Classroom Model. The research flow is presented in Fig. 1.

Fig. 1. Research Framework

3. Results and Discussion

3.1. Ki Hadjar Dewantara's Education Model

Ki Hadjar's multicultural education thinking constitutes nationalistic and universal values. This means that the concept of education rests on the principles of national culture, and the principles of national culture comprises of various groups, races, languages, and various religions. The foundation of Ki Hadjar's education is Pancadharma (five principles) consisting of: (1) Principles of Independence; (2) Principle of Nationalism; (3) Principles of Humanitarian; (4) Principles of Culture; (5). Principles of Nature [10], [11]. Meanwhile, in terms of content, Ki Hadjar emphasized the doctrine of character or morality, the doctrine of humanity (humanism), independence (freedom) and national culture (multiculturalism). As stated in the Pancadharma, Ki Hadjar hopes that education is in line with the national cultural products. This principle is characterized by culture and nationality, and does not only support certain groups, therefore, education does not come from a particular religion, but it is free which includes all elements of religion, belief, class, ethnicity, and races around the world (multicultural) [10].

3.2. Main Strategy

In accordance with the Vision of Indonesian Education 2035, specifically Building the Indonesian community to become outstanding lifelong learners, continue to develop, prosper, and have noble morals by cultivating Indonesian cultural values and Pancasila, the State in this case is the Ministry of Education and Culture (Kemendikbud) has launched a prodigious program called "MERDEKA BELAJAR" (Liberty of Learning). The main strategies for independent learning are as follows [12]. 1) Implementing collaboration and inter-school coaching (TK-SD-SMP-SMA, informal): school empowerment program, peer learning programs, joint administrative management, values-based informal education; 2) Improving the quality of teachers and school principals: improving the recruitment system, improving the quality of training, assessments, and developing community/learning platforms; 3) Building a technology-based national education platform: student-centered, interdisciplinary, relevant, project-based and collaborative; 4) Improving the national curriculum, pedagogy, and assessment: simplification of material content, focusing on literacy and numeracy, character development, competency-based, and flexible; 5) Increasing collaboration with local governments to ensure equitable distribution: collaborating with local governments through a personal and consultative approach and provide rewards based on merit; 6) Building the school / learning environment of the future: safe and inclusive, utilizing technology, collaborative, creative and experiential learning systems; 7) Providing incentives for the contribution and collaboration of the private sector in the field of education: CSR funds, tax incentives, public private partnerships, autonomy, and greater profits; 8) Encouraging industrial ownership and vocational education autonomy: industry or associations are involved in curriculum development, encouraging learning, and financing education through private sector donations or CSR; 9) Establishing world-class higher education: differentiating the mission of higher education as centers of excellence and strengthening links with industry and global partnerships; 10) Simplifying accreditation mechanisms and provide more autonomy: voluntary, data-driven, reference global best practice, and industry or community engagement.

Among the ten strategic points, at the operational level, the outputs generated from the program are as follows: (1) Learning is a pleasant experience; (2) Open system (cooperation between stakeholders); (3) The teacher plays a role as a facilitator in learning activities; (4) Competency and

value-based pedagogy, curriculum, and assessment; (5) A student-centered and individual needs-based approach; (6) Learning that makes use of technology; (7) Industry-relevant programs; (8) Freedom to innovate; and (9) As an agent for all stakeholders.

3.3. Disrupt Education in 2020 Model

The development of digital technology has greatly influenced the development of educational technology. Artificial intelligence will continue to fill gaps in education and learning and help personalize and streamline education. When students interact with Internet of Things (IoT) devices that are connected to other digital devices, data will be collected. Big data and Data Science technologies are essential for personalized learning, determining interventions, and what tools are effective for education. The rapid development of virtual reality and augmented reality, or a combination of the two, enables to create learning opportunities that involve students being able to interact more with the lesson content being studied indefinitely. Education is also becoming increasingly mobile, and educational institutions are looking for measures to enhance the student experience by applying mobile technology. This technology requires a decent network to handle high traffic demands, and with 5G technology it will provide new powerful mobile data capabilities. As published by Bernard Marr in Forbes magazine in 2020 entitled Education Trends 2020, it can be described as follows [13].

First, Accessible Education [14]: Online learning allows students to receive digital education and learning resources more easily, even in remote areas and it is easier for them to share with each other without any geographic boundaries. Online learning also allows students to get learning customized to their personal needs. There are technological solutions for students who have physical disabilities to learn with adaptive technology. Second, More data-driven insights [15]: Technology can help educational institutions and educators to be more effective and efficient. Technologies, including big data, machine learning, and artificial intelligent will provide more personalized and deeper data for individual learning needs. Third, Personalized education [16]: Although personalized education is not a new concept, with the help of technology, it can be easier to implement. These days classrooms are diverse and complex. Through the application of technology, it enables to better meet the needs of every student. Technology can assist teachers to carry out administrative tasks such as assessment and testing to individual students. Teachers can access various learning tools through technology to provide students with different learning experiences outside of the predefined curriculum.

Fourth, Blended education, to a greater extent, between reality and digital [17]: Virtual reality and augmented reality or a combination of the two provide immersive learning experiences for students wherever they are. The lesson about the Majapahit kingdom can really come alive when a student puts on a VR headset and walks around using the digital version from that time period. Students can experience events that are impossible to feel and are difficult to conceptualize when going through conventional learning. This technology enables learning by doing. Another example is that students are currently accustomed to using google assistant to define a word when doing school work at home. This technology can also support learning and improve the quality of education in different ways. Fifth, School automation [18]: A number of schools are starting to conduct flexible, interactive, and efficient online assessments. Automation continues to transform schools as more smart tools are used, including facial recognition technology to record attendance, autonomous data analysis to inform learning decisions thus, teachers do not need to analyze data and support to automate administrative tasks. When a student interacts with online technology, they leave a digital footprint as information as input in analyzing learning.

3.4. Future of Classroom Model

Future of the Classroom is part of the K-12 educational evolution series, charting current and emerging classroom education trends. Google is working with Canvas8 as a research partner to conduct a global analysis that includes interviews with 14 experts who are specific global thought leaders in education; a review of the academic literature published in the last two years that has been reviewed in reputable journals, as well as policy research and surveys involving teachers. The research results resulted in eight trends that emerged in K-12 education as follows [19]. First, Digital Responsibilities [6], [20], [21]. Parents desire schools to assist students to have healthy behaviors when using technology and interacting with the digital world safely and confidently. Second, Computational thinking [22]–[24]. Students are able to develop problem solving along with digital skills therefore, they are better prepared to work in the future. Third, Collaborative class [25]–[27]. The school focuses on openness, flexibility and collaboration. Classrooms are redesigned to fit those

needs. Fourth, Pedagogical innovation [28]–[30]. Teachers are motivated to create livelier classes or students are actively involved, and teachers want to simplify administrative tasks more to focus further on teaching. Fifth, Life Skills & preparing for the workforce [31]–[33]. Children need to have a more holistic education beyond test standards to include social and vocational skills. Sixth, Student-Centered Learning [34]–[36]. It is important for students to have more rights to choose the education they learn and need, thus, the classroom design is more adaptable to them. Seventh, Connecting Parents & Schools [37]–[39]. Parents want to be more involved in their child's education and technology can connect them with teachers. Eighth, Technology that is currently developing [40]–[42]. Bringing new technology to the classroom to create more innovative and engaging teaching methods.

3.5. The WEF Education 4.0 Framework

The future class is a new educational model for future learning needs in the Industrial Revolution 4.0 designed by the World Economic Forum in January 2020. This class is based on The WEF Education 4.0 Framework show in Fig. 2. There are eight "critical characteristics" of The WEF Education 4.0 Framework which can be explained as follows [43]. First, Global standard skills [44]. The skills they have are in accordance with the needs of the global world and can play an active role in the global community. Second, Innovation & creativity [41]. This includes deepening skills for innovation, problem solving, analytical thinking, creative and systems analysis.

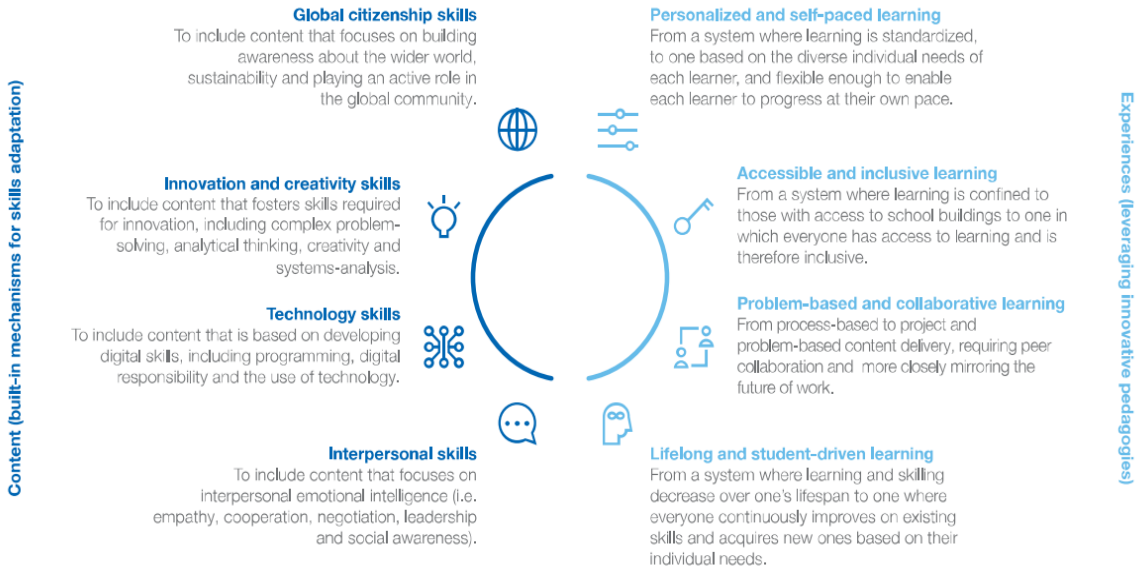

Fig. 2. The WEF Education 4.0 Framework

Third, Technological skills [45]. Building digital skills, programming, digital responsibility in the use of technology. Fourth, Interpersonal skills [46]. Focusing on interpersonal emotional intelligence, empathy, cooperation, negotiation, leadership, and social sensitivity. Fifth, Personal & independent learning [47]. Learning based on the different needs of each individual; more flexibly adjusted at their own pace. Sixth, Accessible & inclusive education [25]. Each individual is facilitated and can inclusively access learning. Seventh, PBL & Collaborative education [48]. Moving from process-based to project-based and problem-based content delivery, which requires peer collaboration and more closely resembles/reflects future work. Eighth, Lifelong and student-driven learning [47]. Each individual is constantly improving existing skills and acquiring new ones based on individual needs.

3.6 . Ki Hadjar Dewantara's Model with the Education Roadmap 2020-2035

Ki Hadjar Dewantara's education model consists of five principles that can be synchronized with the ten main strategies for independent learning as presented in Table 1. Table 1 describes the alignment or synchronization of Ki Hadjar Dewantara's five educational principles with the Main Strategy of Liberty of Learning in the 2020-2035 Indonesian Education Roadmap. This synchronization is one of the solutions in determining the direction of future education in Indonesia

while still based on national character and local wisdom to realize (a) superior and holistic students who are not focused on cognitive abilities alone and (b) lifelong students who have global competence behave in accordance with the values of Pancasila [11], [12].

Table 1. The Mapping of Ki Hadjar Dewantara's Educational Principles/Models with the Main Strategy of Liberty of Learning

No	Ki Hadjar Dewantara's Educational Principles	Main Strategy of Liberty of Learning (based on the number in the main strategy)
1.	Principle of Independence	1; 3; 7; 8
2.	Principle of Nationalism	3; 5; 6; 7; 9; 10
3.	Principle of Humanitarian	2; 3; 4
4.	Principle of Culture	9; 10
5.	Principle of Nature	2; 6

3.7. The suitability between Merdeka Belajar with the three models of future education

After the explanation of the main strategy of Liberty of Learning (Merdeka Belajar) in the Indonesia Education Roadmap 2020 as a picture of the future of national education and several predictions of future education published by Bernard Marr in Forbes magazine in 2020, the World Economic Forum by releasing schools of the future, and the Future of the Classroom Model by Google for Education, mapping was carried out to obtain strategies and characteristics or actions. These results can also illustrate the suitability between the main strategy of Merdeka Belajar with the three models of future education as shown in Table 2. The following explanation describes the results of the mapping that has been done, the following strategies and characteristics or actions are obtained. First, Strategy 1 with characteristics or measures: easy access to education; inclusive education; problem-based learning and collaborative learning; pedagogical innovation; accessible connection between parents and schools. Second, Strategy 2 with characteristics or measures: school automation; digital responsibility; collaborative classes; life skills and workforce; student-led learning; developing technology; innovation and creativity; technological skills; pedagogical innovation; evolving technology.

Third, Strategy 3 with characteristics or measures: easy access to education; data-based insights; educational integration between reality & digital; school automation; digital responsibility; collaborative classes; life & workforce skills; student centered learning; developing technology; inclusive education; PBL & collaborative education; lifelong and student-driven learning. Fourth, Strategy 4 with characteristics or measures: more personal education; computational thinking; pedagogical innovation; life & workforce skills; student centered learning; innovation and creativity; interpersonal skills. Fifth, Strategy 5 with characteristics or measures: easy access to education; life skills & workforce; developing technology; inclusive education. Sixth, Strategy 6 with characteristics or measures: easy access to education; data-based insights; more personal education; education mingles in real & digital; school automation; collaborative classes; developing technology; innovation & creativity; technological skills; inclusive education; PBL & collaborative education. Seventh, Strategy 7 with characteristics or measures: accessible & inclusive education; pedagogical innovation; life & workforce skills; evolving technology. Eighth, Strategy 8 with characteristics or measures: easy access to education; data-based insights; school automation; computational thinking; pedagogical innovation; global standard skills; innovation & creativity; technological skills. Ninth, Strategy 9 with characteristics or measures: easy access to education; data-based insights; more personal education; education mingles in real & digital; school automation; digital responsibility; computational thinking; collaborative class; pedagogical innovation; life & workforce skills; student centered learning; connecting guardians & schools; emerging technology; global standard skills; innovation and creativity: technological skills; interpersonal skills; personal & independent study; accessible & inclusive education; PBL & collaborative education; lifelong and student driven learning. Ninth, Strategy 10 with characteristics or measures: data-based insights; pedagogical innovation; life skills & workforce; emerging technology; global standard skills.

Table 2. The Mapping of 2020 Education Trend within Bernard Marr (A), Google for Education (B), and The WEF Education 4.0 Framework (C)

Indonesian education roadmap 2020-2035	Bernard Marr (Forbes, 2020)				
	easy access to education	data-based insight	more personalized education	educational integration between reality & digital	school automation
Implementing collaboration and fostering between schools (1)	✓				
Improving the quality of teachers and school principals (2)					✓
Building a technology-based national education platform (3)	✓	✓		✓	✓
Improving the national curriculum, pedagogy, and assessment (4)			✓		
Increasing collaboration with local governments to ensure equitable distribution (5)	✓				
Building the school / learning environment of the future (6)	✓	✓	✓	✓	✓
Providing incentives for the contribution and collaboration of the private sector in education (7)	✓				
Industrial involvement and vocational education autonomy (8)	✓	✓			✓
Shaping world-class higher education (9)	✓	✓	✓	✓	✓
Simplifying accreditation mechanisms and wider autonomy (10)		✓			

(A)

Indonesian education roadmap 2020-2035	Google for Education							
	Digital responsibility	computational thinking	collaborative classroom	pedagogical innovation	life and workforce skills	student-centered learning	parents and school connection	emerging technology
Implementing collaboration and fostering between schools (1)			✓	✓			✓	
Improving the quality of teachers and school principals (2)				✓				✓
Building a technology-based national education platform (3)	✓		✓		✓	✓		✓
Improving the national curriculum, pedagogy, and assessment (4)		✓		✓	✓	✓		
Increasing collaboration with local governments to ensure equitable distribution (5)					✓			✓
Building the school / learning environment of the future (6)			✓					✓
Providing incentives for the contribution and collaboration of the private sector in education (7)				✓	✓			✓
Industrial involvement and vocational education autonomy (8)		✓		✓	✓			✓
Shaping world-class higher education (9)	✓	✓	✓	✓	✓	✓	✓	✓
Simplifying accreditation mechanisms and wider autonomy (10)				✓	✓			✓

(B)

Indonesian education roadmap 2020-2035	World Economic Forum							
	Global standard skills	Innovation and Creativity	Technological skills	Interpersonal skills	Personal and independence learning	Accessible and inclusive education	PBL and collaborative education	lifelong and student drivel learning
Implementing collaboration and fostering between schools (1)						✓	✓	
Improving the quality of teachers and school principals (2)		✓	✓					
Building a technology-based national education platform (3)						✓	✓	✓
Improving the national curriculum, pedagogy, and assessment (4)		✓		✓				
Increasing collaboration with local governments to ensure equitable distribution (5)						✓		
Building the school / learning environment of the future (6)		✓	✓			✓	✓	
Providing incentives for the contribution and collaboration of the private sector in education (7)						✓		
Industrial involvement and vocational education autonomy (8)	✓	✓	✓					
Shaping world-class higher education (9)	✓	✓	✓	✓	✓	✓	✓	✓
Simplifying accreditation mechanisms and wider autonomy (10)	✓							

(C)

3.8 The Future of Indonesian Education Model

Based on the results of the two mapping processes that have been carried out before, specifically between Ki Hadjar Dewantara's Education Model and the Indonesian Education Roadmap 2020-2015 and among the Indonesian Education Roadmap 2020-2015, the Disrupt Education Model in 2020, and The WEF Education 4.0 Framework. Hence, the Future of the Model Classroom can be arranged as a framework as shown in Fig. 4. The future Indonesian education framework model is centered on five principles (Panca Dharma), specifically (1) the Independence principle characterized by collaboration & coaching, technology platform, incentives & contributions, ownership & autonomy; (2) the Nationality principle is characterized by technology platforms, local government collaboration, future schools, incentives & contributions, world class education, accreditation mechanisms & autonomy; (3) the nature principle characterized by quality of teachers & headmaster, future school; (4) The culture principle is characterized by world class education, accreditation mechanism & autonomy; and (5) Humanity principle characterized by quality of teachers & headmaster, technology platform, curriculum, pedagogic, assessment. Each feature (at layer 2) of Panca Dharma (five principles) (at layer 1) contains characteristics or measures (at layer 3) which are compiled from the five characteristics of the Marr model (Table 2A); eight characteristics of google for education (Table 2A); eight characteristics of google for education (Table 2B); and eight characteristics of the WEF (Table 2C). Systematically, Fig. 3 consists of three important concepts which can be explained as follows. First, Layer 1 (Principles) explains that The Future of Indonesian Education is established on the five principles of Ki Hadjar Dewantara's educational model as an outline of the direction of Indonesia's future education policy.

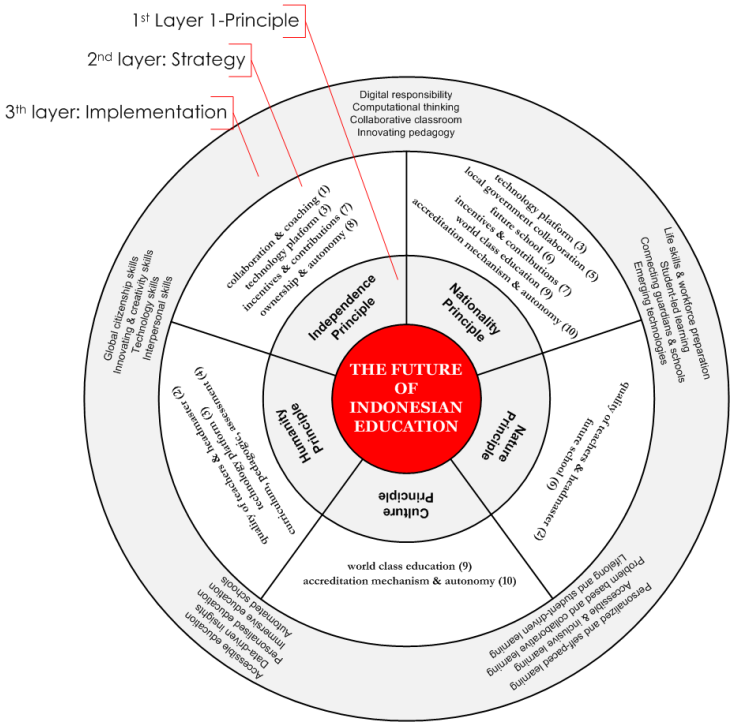

Fig. 3. The Future of Indonesian Education Model Framework

[a.] (source: drawn by Roni Herdianto)

Second, Layer 2 (Strategy) explains that this layer consists of ten main strategies for independent learning in the Indonesian Education Roadmap 2020-2015 which are used as a strategy for implementing the five principles of Ki Hadjar Dewantara's educational model (Layer 1). Third, Layer 3 (Implementation) describes the five characteristics of the Marr model; eight characteristics of google for education; and eight of the characteristics of the WEF are steps that are the implementation of the ten main strategies for independent learning that have been established by the previous Ministry of Education and Culture (Layer 2). These three important concepts become principles, strategies, and implementations to build a future national education system in realizing the Indonesian Education Vision 2035, which is to form lifelong students who acquire global competence and behave in accordance with Pancasila values [25]. In the end, with all its weaknesses and strengths, all nations

need to adapt to the changes that are occurring globally, radically, and exponentially. It takes a systematic and holistic long-term planning model and strategy in the middle of the great disruption era while still upholding the character of the nation.

4. Conclusion

Globally, technological, social, and environmental transformations are occurring. The disruption caused by technology will affect all facets of human existence. There are sociocultural shifts in the demographics and socioeconomics of the global population. During this chaotic period, a nation with a large population and abundant natural resources, such as Indonesia, must adapt to the global environment. The two mapping processes that have been carried out, specifically between Ki Hadjar Dewantara's Education Model and the Indonesian Education Roadmap 2020-2015 and between the Indonesian Education Roadmap 2020-2015, the Disrupt Education Model in 2020, The WEF Education 4.0 Framework, and the Future of the Classroom Model can be compiled a framework. The framework for the future Indonesian education model consists of three important concepts as principles, strategies, and implementation to build a future national education system in realizing Indonesia's Education Vision 2035. Exploring the potential of the Open Journal Systems Platform as a model and alternative learning medium in higher education is one example of the implementation of the Future of Indonesian Education Model Framework. This is being done as part of the implementation of the Future of Indonesian Education Model Framework.

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Declarations

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