The Implementation of Maritime Curriculum in Indonesia

Sri Hidayati[1], Ishak Abdulhak[2], Dinn Wahyudin[3]

Abstract: *The curriculum in primary and secondary education in Indonesia is developed with the principle of diversification, which is based on local needs, school characteristic, and student needs. Maritime curriculum has been developed based on local need. The curriculum was developed in the framework of a national program to achieve the vision of Indonesia as a world maritime center. Implementation has been limited in 34 provinces since 2017. Implementation can be done through 4 (four) implementation models suggested in the implementation guidelines. The research objective is to see how far the implementation is in the schools. This research uses qualitative methods with documentation and interview study techniques. The school samples are 18 schools. The results of the study shows that: (1) only a view school put the maritime curriculum on their schools vision and mission, (2) all schools implement the curriculum as a context of subjects, (3) all schools implement the curriculum as an subject enrichment, (4) only one school implement as a local content subject, (5) a schools implement the curriculum as an extracurricular activities, and (6) all schools implement the curriculum as a school culture. Based on the findings, it can be concluded that we still have to make an effort so that the maritime curriculum can be implemented properly to achieve the national goals.*

Keywords: curriculum, maritime, evaluation, implementation

1. Introduction

Indonesia is a maritime nation. The Unitary State of the Republic of Indonesia is a large island nation. Indonesia's maritime glory in the past has been proven and become a part of history. This can be traced from the history of Indonesian civilization from time to time (Strategic Plan of the Coordinating Ministry for Maritime Affairs in 2015 - 2019).

The government's goal is to make Indonesia as a global maritime axis. To meet the goal, Indonesia need requires prerequisites to be assisted, education and training is the reliable and visible to choose on human resources development. This effort can be implemented in school by maritime and training school curriculum around Indonesia. The Maritime Curriculum is a part of the Indonesian Maritime Policy,andit has been developed and implemented in piloting schools in all provinces since 2017. The successful of the project could be assess from the school curriculum document and implementation of learning experiences in school daily life. School Curriculum Document reflect all their activities, both national curriculum and local curriculum implementation and each school has todevelop it before they start to give serve to student to meet the national educational goals. School Vision is the future ideals of the student of this school, which are formulated from the input of all school members (Minister Education Regulation No. 61/2014).

School Curriculum Document consist of School Vision and Mission, School Curriculum Goals, Curriculum Content, and Academic Timetable. School Vision is a foundation to make a school program for whole school activities by intracurricular, extracurricular, Local Content, and School Culture. From this document we can evaluate and make a conclusion if the maritime curriculum are well implemented or not.

2. Method

The writer focused this research in the implementation aspect of national programe by taking a data from curriculum document. This research tried to seek information written in the school curriculum document, the statement about maritime content which is state by school in their vision and mission and school educational goals. This research uses a qualitative approach through the study of documentation. Qualitative analysis on data taken from document as a base to make a judgement about implementation of maritime curriculum implementation in school level in Indonesia. The data source is collected from 18 junior high schools from 18 provinces in Indonesia.

Indonesian Marine Policy
The Indonesian people live and develop in the islands along the equator, a strategic position that crosses between two large oceans, the Indian Ocean and the Pacific Ocean, and between two continents, the Asian Continent and the Australian Continent. In addition, the Indonesian nation also has a rich variety of natural resources, both on land and at sea. The location and geographical shape of Indonesia and its abundant natural resources have made Indonesia's position very unique in the international world, especially in the field of marine law (50 Years of the Juanda Declaration, Indonesian Territorial History, Collection of Papers, Directorate of Historical Geography, 2007: Djuanda Declaration in Historical Perspective, HasjimDjalal).

The geographical characteristics of Indonesia, which has the number of 17,504 islands and the second longest coastline in the world and its socioeconomic conditions which are in the crossing of two continents, namely Asia and Australia, and two oceans, namely the Pacific Ocean and Indian Ocean, places Indonesia in an important and strategic position in global level. With the third largest area of tropical forest in the world, 18% of the world's coral reefs, 23% of the world's mangrove forests and 3 million hectares of seagrass beds (http://www.wwf.or.id/?10741/Deforestasi;http://lipi.go.id/li pimedia/konservasiterumbu-karang-indonesia-

mendesak/8489), Indonesia is rich in food sources for marine life. With this condition, Indonesia has a great potential to influence political stability, the economy and regional environmental security.

Indonesia is also in a cross between economic and political power. Geoeconomically and geopolitically, Indonesia needs to play an important and strategic role by optimally utilizing marine, coastal and small island resources for the benefit and progress of the nation. As the only country that is able to expand its sovereignty and sovereign rights, Indonesia is the largest archipelago in the world that has international recognition without military force. Indonesia, which has full sovereignty over 3.2 million km2 of territorial waters and sovereign rights over some 2.6 million km2 in Indonesia's Exclusive Economic Zone, is a center of high biodiversity and provides other environmental services functions. The international community must sail through the territory of Indonesia's sovereignty and sovereign rights for the purposes of navigation, communication, planting and laying of fiber optic cables, gas pipelines, trading various commodity goods, manufacturing, and exporting energy and services. The sea, coast and small islands of Indonesia also provide beauty and protection for the community from disasters and habitats for other living things.

This very rich marine potential has not been utilized optimally, but ironically in parts of Indonesia's marine and coastal areas it has been damaged to varying degrees. Based on 2013 One Map of Indonesia data, the area of Indonesia's coral reefs is 2.5 million hectares. However, based on the exposure of the LIPI Oceanographic Research Center it is known that coral reefs in 93 regions and 1,259 locations in the study conducted from 1993 to 2015, only about 32 percent were in good and very good condition, the rest were in bad and bad conditions (LIPI, 2016). This damage impacts on the loss of certain marine biota habitats and increases the risk of disasters in coastal areas, such as abrasion and tidal flooding. This condition is exacerbated by the large number of fish theft by foreign fishermen who use advanced technology resulting in huge state losses (Pusluh KKP, 2015).

This damage to marine resources is caused by the ignorance and / or indifference of the community to the preservation of these marine resources as indicated by activities such as destructive fishing (poisonous poisoning and bombs) and over-cutting of mangrove forests for economic activities. This can happen because the level of awareness of the people is still low, maritime knowledge and information is limited, education is still terrestrial biased, and people has limited limited knowledge in marine field. This condition has tobe a serious attention for all elements of society and the government, both central and regional.

The government's goal to make Indonesia the world's maritime axis requires prerequisites that must be met, including knowledgable and skilled human resources. This effort can be attaint through maritime education and training. This is necessary because of the challenges ahead in the fulfillment of skilled and professional workers in the maritime field in the face of the industry 4.0 era. Unfortunately our workforce profile in 2017 recorded

60.08% of the national workforce only graduated from elementary and junior high school. In addition, to develop Indonesia as a global maritime axis, it is necessary to build maritime and maritime culture in the community through education and training (Ministry of Maritime Affairs Strategic Plan).

Indonesia's development program which is reflected in NAWA CITA (Nine Priority Agenda of Government) and Maritime Policy of Indonesia again gives full attention to maritime development (maritime-oriented), after 69 years of development of Indonesian-oriented land. Maritime civilization became the axis of Indonesia's development pace. This reflects the government's desire to regain the glory of maritime civilization in the past that was extinct.

Presidential Regulation of the Republic of Indonesia Number 16 Year 2017 regarding Maritime Policy Indonesia has mandated the Indonesian people to direct our educational compass to education about marine. This is indicated in the marine policy that requires the existence of a special curriculum on maritime affairs and is carried out to improve the quality of human resources in the maritime field. The Primary and Secondary Education Maritime Curriculum has been compiled jointly by the Ministry of Education and Culture in this case the Puskurbuk, Balitbang together with the Ministry of Maritime Affairs, and is used as a reference by schools in compiling a maritime content school curriculum.

Maritime Curriculum
he curriculum is a set of plans and arrangements regarding the objectives, content and learning materials as well as the methods used to guide the implementation of learning activities to achieve certain educational goals (USPN No. 23 Year 2003). The maritime curriculum is an educational curriculum that is based on maritime historical insights, maritime cultural values, and maritime potential to instill a love of the motherland and the soul of a state defending maritime character in order to build superior and competitive Indonesian people towards achieving the glory of Indonesia as a nation and maritime nation independent, advanced, strong, and based on national interests.

The Primary and Secondary Education Maritime Curriculum which has been established by the Ministry of Education and Culture in 2017 aims at all Indonesian students to have a minimum ability in maritime field so that they have sufficient knowledge about the Indonesian maritime, guarding, loving, exploiting, preserving, and pursuing maritime affairs. Specific objectives of the curriculum are: a) having an attitude of loving the motherland and having the spirit of defending the country with a maritime character that is resilient, critical thinking, leadership spirited, responsible, and adaptive, b). understand and apply science and technology and maritime insight in the use and management of maritime potential on an ongoing basis; and c). understand maritime history and preserve Indonesian maritime culture. The maritime curriculum at SMP / MTs (Class VII to IX) aims to make students: a) have a sense of pride as a maritime nation by knowing the history of the archipelago maritime kingdom, as well as sea transportation and maritime culture, b) having a sense of belonging and

caring for environmental sustainability coast and sea in the context of sustainable development, c) having knowledge of coastal and marine ecosystems and natural phenomena that occur, d) growing creativity and entrepreneurial spirit by having knowledge about the potential and utilization of marine resources for fisheries, commerce and maritime services and technology and navigation of the ships used, e) growing social life and nationalism by having knowledge of the social, economic and maritime cultural dynamics of coastal communities and small islands; and f) developing maritime character and participating in preserving maritime culture.

The curriculum is structured based on the philosophy adopted by the 2013 Curriculum that every students has a potential as well as students as heirs to the nation's sublime cultures (Regulation of the Minister of Education and Culture (Permendikbud) No. 58 of 2014, the Basic Framework and Structure of the SMP/MTs Curriculum). The maritime curriculum is based on historical insights, cultural values, and maritime potential to instill a love of the motherland and statesman spirit with maritime character in order to develop superior and competitive Indonesian people (Puskurbuk, 2017).

The curriculum content is designed according to the objectives to be achieved. The content is part of the curriculum component that is structured to achieve curriculum goals. According to Tyler (1949) and Giles (in Ornstein and Hunkins, 1998) Components of subject content relate to material in the form of science or product of knowledge or scientific processes, which will be taught at a particular type and level of schooling. The content or material has breadth and depth in accordance with the scientific field. The contents also relate to scientific thought patterns (discipline mind) that must be mastered by students. Each subject has its own ontology and epistemology which are different from other subjects. The subject is simply a name for the organization of learning materials which has similarities. This component has the scope and sequence in accordance with the level and continuous class. The contents of the Maritime Curriculum consist of 5 (five) unit, namely 1) Maritime Resources, 2). Geomaritime and Ocean Dynamics, 3). Sea Transportation and Maritime Industry, 4). Maritime History, Culture and Innovation, and 5. Maritime Geopolitics, Law and Security (Puskurbuk, 2017).

3. Curriculum Implementation and Evaluation

Curriculum implementation is the most important part in a curriculum cycle or curriculum engineering (Beauchamp, 1975). The meaning of implementation found in the Oxford Advance Learner Dictionary is written that implementation is the application of something that has an effect or impact. That understanding is the general understanding. While the definition of implementation in the curriculum context of one of the experts who stated by Miller and Seller (1985), which defines the word implementation using three approaches, namely first, implementation is defined as an activity, then implementation is defined as an attempt to increase interaction between the developer's teacher and fellow teacher itself. Then, implementation is also interpreted as a separate entity from the curriculum component. Saylor and Alexander (in Miller and Seller, 1985) formulated the definition of implementation as a process of applying curriculum plans in the form of activities that involve interactions between teachers and students in the context of the school environment. According to Fullan and Pomfret (in Marsh, 2004) the term implementation is the use of curriculum, syllabus, or other planning in the form of practice. Hasan (2007) states that in the context of the curriculum dimension, implementation is a process dimension. The process dimension is implementation as a continuation of a number of plans that have been designed and documented. Ornstein and Hunkins (1998), also said the same thing that "successful curriculum implementation results from careful planning, which focuses on three factors: people, programs, and process". Therefore, aspects of planning, teachers, and students have a vital function in curriculum implementation. The implementation of the Maritime Curriculum has been limited to schools that are fostered by the Coordinating Ministry of Maritime Affairs, as well as working with the main units in the Ministry of Education and Culture in 34 Provinces, at each level only one school is designated.

Maritime curriculum content is an competencies that must be mastered by students. The curriculum content consists of two parts, namely the dimensions of the level of thinking ability and the dimension of knowledge. In this case the contents of the maritime curriculum can be as study material or as Subjects (Mapel) namely Local Content Subjects. As subjectcontent, maritime content can be implemented in existing subjects (Regulation No. 79 of 2014).

To find out to what extent Indonesian maritime policy in the context of the curriculum has been implemented, an evaluation of the vision and mission that has been prepared by the school and its implementation has been carried out. This limited implementation is intended so that the government can see the visibility or the implementation level of curriculum documents implemented by the education unit. By using the experience of limited implementation, it will become the basis for further policies. To find out the implementation of the curriculum, curriculum evaluation is carried out.

In curriculum engineering conceptualized by Beauchamp (1975) evaluation is an activity carried out after curriculum implementation phase. A Curriculum evaluation is assessthe implementing of curriculum policy or program. This evaluation is asses all curriculum dimensions and curriculum components and their interrelationshipsand usually measure the effectiveness of the implementation of the policy or program in order to achieve the stated goals. This view is in line with some of the concepts and definitions of evaluation expressed by the following experts. According to Ali (2014), effectiveness is something that must be assessed from a program or policy, carried out through evaluation activities. Effectiveness is measured starting from the aspects of planning, implementation, and results. Oliva and Gordon (2013), revealed that "evaluation is the process of making judgment". This opinion is in line with the opinion of Worthen and Sanders (in Hasan, 2009), namely the evaluation is done by collecting data or information in the context of decision making.

The Maritime Curriculum Evaluation aims to find out the extent of the idea dimension in this case the Indonesian Maritime Policy, which was launched by the President and has been formulated in the Maritime Curriculum, has been implemented in the schools in this case in junior high school. Evaluation is carried out on the implementation model carried out by the schools. There are 4 models of implementation of the maritime curriculum, namely 1) becoming a context Subject, 2) enrichment of Subject, 3) being an extracurricular activity, 4) becoming a separate subject, and 5) habituation through school culture. Between model 1 (one) and number 2 (two) combined into 1 model, namely Contextualization.

In addition to the five ways of implementation, an evaluation was made of the school's vision and mission statement. The vision and mission of the school is an important aspect in managing the school curriculum. Vision as defined by Charlton (1993) is a picture, goal or target of the future is realistic and credible. Davies and Ellison (1991) define a mission to be how an organization including a school goes about achieving its goal. The existence of a vision for the organization is absolutely necessary because with the vision, the organization can plan for future conditions. It has been proven in the fact that successful organizations at the world level have a clear vision of what they want to achieve in the future. In this globalization era, the role of educational institutions is increasingly demanded to provide management services and professional services to the government and society. This is partly due to the increasing interest and needs of the community towards education.

From the results of the evaluation, from 18 schools the Environmental Awareness became the school's vision and mission, but only as many as 4 (four) schools wrote Maritime as the school's Vision and Mission. The number is very small when compared to the entire school designated as a piloting school. This shows that maritime perspectivehave not yet become the focus of curriculum management in most schools designated as piloting schools. The inclusion of maritime vision and mission has not yet been write on the school curriculum document. The explicit statement of the maritime vision might be caused by the school having included it in the vision of the environmental Awareness. Schools claim that maritime is part of the environment, so maritime is part of environmental education that is integrated in all activities in the school. However, making maritime as a vision set by the school will have positive implications for activities in the school. If it is not explicitly written then the school does not make it the focus of the content of the education carried out at school. The development of vision and mission is a part of the strategic management process. The process of strategic management is often described as a model that involves four basic elements: environmental scanning, strategy formulation, strategy implementation and evaluation and control. The development of vision and mission is a part of strategy formulation. This step not only includes the vision and mission development but also the specifications of strategic objectives and strategy development (Papulova, 2014). From these findings we can conclude that maritime policyhave not been a clear direction for schools. This can affect the level of success of the Government's program.

The evaluation of implementation data in intracuricular activities on subjects shows that all schools implement it in several subjects, especially Science, Social Sciences, Language, Arts, and Crafts. Maritime content is directly related to the student's experience. However, the contents of the maritime curriculum are also relevant to other subjects, such as mathematics and PPKn. This means that schools still claim that maritime content is only charged as content or knowledge content. While students live in an environment that is very close to the sea and coast. It is hoped that in implementing the curriculum, the surrounding environment becomes an authentic source of learning for the overall development of student competencies.

Implementation through extracurricular activities and school culture is chosen by all schools as a method of implementation. Most schools choose activities to make murals in schools or paint schools with maritime themes, clean up marine trash, travel to the sea, or fish eating activities as a method of implementation. This activity in implementing the curriculum can be chosen as a method of implementing the maritime curriculum. However, if it is related to the quality of learning, this activity still needs to be improved by emphasizing the aspects of caring, using it wisely, and providing motivation so that students can pursue future careers in fields related to maritime affairs. Extracurricular activities and school culture are only a way. The most important thing in extracurricular activities and school culture is building a student positive value and attitude.

The method of implementing Local Content Subjects was only chosen by one school, the school of the Hang Tuah Foundation. This is understandable because the Hang Tuah school is a school under the guidance of the TNI Angkatan Laut. For other schools, if local content is chosen as a stand-alone subject, then the need for educational resources as an implication of increasing the burden of learning local content is borne by the local government that stipulates (Article 8, Permendikbud No. 79 of 2014). This makes it difficult for schools to choose Local Content Maritime Subjects. Determination of Maritime Local Content as a Stand-alone Subject is the most appropriate choice for schools around the coastal area. Implementation of these Subjects will have a good impact on students because they will build competencies that are appropriate to their daily environment and will contribute to developingthe country when they are adult. This choice will have a positive impact on the Indonesian nation to achieve its vision of development.

4. Conclusion

The successful implementation of maritime education in schools is an important indicator of the achievement of the development plans that have been set by the President. Evaluation of the Implementation of the maritime curriculum in 18 piloting schools provides data that the curriculum has been implemented well. All schools have implemented it through the context of compulsory subjects, extracurricular, and school culture. However, schools have not fully included maritime as one of their visions and missions explicitly.

Thus, in order to better implement the curriculum, various improvement efforts need to be made so that it produces a good impact on development.

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