



INCLUSIVE MATHEMATICS EDUCATION IN JUNIOR HIGH SCHOOL THROUGH MERDEKA CURRICULUM

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ABSTRACT

Every student possesses distinct learning needs that necessitate diligent efforts for fulfillment, particularly those requiring inclusive education. One of the pivotal strategies for meeting these requirements is through the curriculum. Presently, Indonesia employs the Merdeka Curriculum. This study aims to assess the efficacy of the Merdeka Curriculum in adequately facilitating inclusive mathematics education. The research methodology adopted involves document analysis. The principal focus of this research entails scrutinizing 12 regulatory documents and governmental policies concerning the Merdeka Curriculum and inclusive education, accessed through the [Database Peraturan | JDih BPK](#). The findings of this research are as follows: 1) The regulations and policies of the Merdeka Curriculum adequately accommodate students' learning needs through inclusive education, 2) Inclusive mathematics education is facilitated by the freedom to determine the flow of learning objectives and differentiation strategies, and 3) There are currently no guidelines or specific learning outcomes established in the field of mathematics for students with disabilities or exceptional intellectual and/or gifted abilities.

Keywords: *inclusive education, mathematics education, Merdeka curriculum.*

INTRODUCTION

Every student possesses distinct characteristics and thinking styles, especially when attempting to construct their knowledge through their learning experiences in school. Therefore, it is essential to review whether the curriculum implemented adequately caters to students' needs. This is crucial because they must have a need for it. Here, the term 'need' refers to intellectual

needs (Harell, 2009). There is always the possibility that what is being taught may not align with the intellectual needs of the students. The intellectual needs comprise 5 parts, namely: 1) Need for certainty, 2) Need for causality, 3) Need for computation, 4) Need for communication, and 5) Need for structure (Bakar, Suryadi, & Darhim, 2019).

The understanding that learning and assessment can't be standardized led to inclusive education (IE). IE is a system of educational provision that offers opportunities for all learners with disabilities and exceptional intellectual and/or gifted abilities to partake in education or learning within an educational environment alongside typically developing students (Mendiknas RI, 2009). Furthermore, IE can also be interpreted as an effort to accommodate a more holistic approach to support the diverse learning needs of children, such as indigenous children, girls, individuals residing in rural and remote communities, street children, ethnic minorities, and anyone at risk of being marginalized (Armstrong, Johansson-Fua, & Armstrong, 2021; United Nations, 2015). Ensuring this right should be facilitated within the education system and policies implemented.

Education policies change to meet students' current needs. Indonesia has had 11 implemented curricula, which include: 1) *Rentjana Pelajaran 1947*, 2) *Rentjana Pelajaran Terurai 1952*, 3) *Rentjana Pendidikan 1964*, 4) *Kurikulum 1968*, 5) *Kurikulum 1975*, 6) *Kurikulum 1984*, 7) *Kurikulum 1994 dan Suplemen Kurikulum 1999*, 8) *Kurikulum Berbasis Kompetensi (KBK) 2004*, 9) *Kurikulum Tingkat Satuan Pendidikan (KTSP) 2006*, 10) *Kurikulum 2013 (K-13)*, and 11) *Kurikulum Merdeka* (Cholilah, Tatuwo, Komariah, Rosidiana, & Fatirul, 2023; Ayudia, et al., 2023; Eka, 2023; Abidin, et al., 2023). Presently, Indonesia employs the Merdeka Curriculum (MC). This is irrespective of the preconception that when policymakers change, the curriculum changes as well. (Mulyasa, 2021; Pratama, 2023; Aprima & Sari, 2022; Presiden RI, 2021).

In the MC, teaching materials are arranged in phases from A to F based on complexity. At the junior high school (JHS) level, it falls under phase D. Considering this, more research on Inclusive Education (IE) in mathematics is necessary. Hence, this study focuses on Inclusive Mathematics Education (IME) in JHS through the MC.

METHODS

This study aims to assess the efficacy of the MC in adequately facilitating IME. The research methodology employed in this study is document analysis. Document analysis focuses on scrutinizing written records or documentation (whether in text, images, videos, etc.) to comprehend specific issues, trends, or observed phenomena (Creswell & Creswell, 2022). The primary documents

analyzed in this research consist of government regulations and policies regarding the MC and IE, accessed through the [Database Peraturan | JDIH BPK](#).

RESULTS AND DISCUSSION

Based on the document search results, 12 relevant regulations and policies related to the MC were obtained, included: *Keputusan Kepala BSKAP Kemendikbudristek RI (008/H/KR/2022, 002/H/KR/2022, & 033/H/KR/2022)*, *Peraturan Mendikbudristek RI (No 5 Tahun 2022, No 7 Tahun 2022, No 16 Tahun 2022, No 21 Tahun 2022, & No 28 Tahun 2021)*, *Peraturan Mendiknas RI No 70 Tahun 2009*, *UU RI No 20 Tahun 2003*, *PP RI No 57 Tahun 2021*, and *Perpres No 62 Tahun 2021*. The MC is carried out based on *Keputusan Kepala BSKAP Kemendikburistek No 033/H/KR/2022* (BSKAP, 2022b). It is acknowledged that in the previous policy, accommodations regarding learning outcomes were not fully incorporated, particularly in special education, empowerment, and proficiency in equivalent education (BSKAP, 2022a).

Keputusan Kepala BSKAP Kemendikbudristek RI No 033/H/KR/2022 has been accompanied by learning outcomes at each level. The rationalization of the learning objectives (LO) presented pertains to the importance of studying mathematics. Generally, the benefits highlighted in this rationalization encompass: 1) The necessity for the development of modern technology, 2) Its role in other disciplines, 3) Advancing logical, analytical, systematic, critical, and creative thinking, and 4) The ability to survive in constantly changing, uncertain, and competitive circumstances. Meanwhile, the rationale for IME has not been explicitly stated. Implicitly, it already encompasses moral values such as proficiency, estimation, accuracy, systematicness, rationality, patience, independence, discipline, perseverance, resilience, self-confidence, and creativity. It is hoped that by studying mathematics, students will acquire the ability to think creatively to address everyday life problems (Subhi, Herman, & Darhim, 2023). This emphasis is particularly stressed at the JHS level, which focuses on knowledge to enhance students' competencies for independent living and further education (Presiden RI, 2021a; Mendikbudristek RI, 2022a).

Mathematics characteristics are visible through how content and process elements are organized. The content elements comprise 5 subject matters: numbers, algebra, measurement, geometry, and data analysis and probability. Meanwhile, the process elements encompass 5 mental activities, including mathematical reasoning and proof, mathematical problem solving, communication, mathematical representation, and mathematical connections. It can be understood that in this curriculum, mathematics is not taught as separate units from one another. Instead, it is grouped into elements that should subsequently be differentiated according to students' needs.

Technically, there is no information on whether the LO are adapted to IE. Looking back, the foundation of IE is found in *Peraturan Mendikbudristek RI No 70 Tahun 2009*. The regulation describes IE for students who have abnormalities and have the potential for special intelligence and/or talent (Mendiknas RI, 2009). Similarly, *UU RI No 20 Tahun 2003* on the national education system states that special education is

organised inclusively or in the form of special education units at the primary and secondary education levels (Presiden RI, 2003; Mendikbudristek RI, 2021). Similarly, *Peraturan Mendikbudristek RI No 7 Tahun 2022* mentions the term inclusive only in religious education (Mendikbudristek RI, 2022b). Therefore, the specific mathematics content for IE has not been included. This is due to the diversity of conditions that may be sceptical when the curriculum framework must be made with more specific segments.

Education necessarily involves the activity of assessment and it would be better if the assessment is given based on the student's talent or ability (Ruseffendi, 1991). As explained in *Peraturan Mendikbudristek RI No 21 Tahun 2022* that assessment can be carried out by diagnostic assessment, formative assessment, and summative assessment (Mendikbudristek RI, 2022d; Presiden RI, 2021a; Mendikbudristek RI, 2022c). Where diagnostic assessment is conducted at the beginning of learning, formative assessment is conducted during or while learning, and summative assessment is conducted at the end of learning. This gives teachers the freedom not to be fixated on rigid assessments.

Education needs to be viewed with a broader landscape. This is assisted by exploring educational concepts that suit the needs. Vithal (2003) proposed 5 dual concepts that can be developed in mathematics education, namely: 1) structure and freedom, 2) authority and democracy, 3) mathematics and context, 4) differentiation and equity, and 5) actuality and potentiality. The first and fourth concepts are specifically relevant to IME through the MC.

In the concept of structure and freedom, learning activities are faced with conditions that require both to be carried out together instead of conflicting with each other. Structure can be seen from the design of learning activities that have been prepared by teachers based on the MC. The design is sewn based on phases which are continued into elements, derived into LO, and arranged as needed into a LO Flow (BSKAP, 2022c). The following is a figure of how the structure of the preparation of phase D in the MC with the adaptation of the IE process.

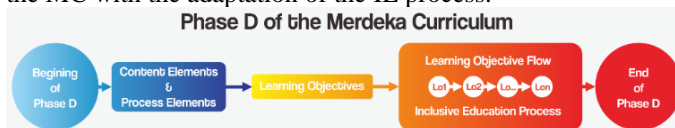


Figure 1. Phase D of the MC.

Based on figure 1, freedom can be seen from the flexibility of the LO1 to LO4 arrangement which can also be adapted according to the desired IE process. Freedom is also reflected during the learning process which involves active participation of students to be involved in determining the LO flow.

The following concept is about differentiation and equity. The MC supports diverse learning. Differentiated learning allows students to grasp subjects based on their abilities, preferences, and needs, preventing frustration and feelings of failure in their learning journey. (Breux & Magee, 2013; Tomlinson & Moon, 2013). The differentiation strategy carried out is in process differentiation, content differentiation, and product differentiation (Khristiani, et al., 2021; Nurfata & Pujiastuti, 2023). The following is a figure explaining the differentiation strategy.

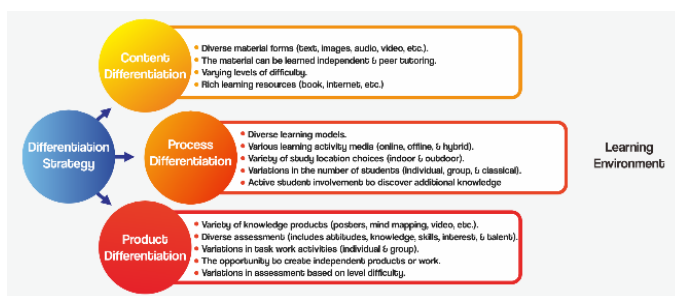


Figure 2. Differentiation Strategy.

Figure 2 describes the differentiation strategies that accommodate students' learning needs. One of the most important is also the condition of the learning environment that must support IE. The principle of equity lies in the equal fulfilment of the learning rights of every student.

CONCLUSION

Based on the results and discussion, it can be concluded that: 1) The regulations and policies of the MC adequately accommodate students' learning needs through IE, 2) IME is facilitated by the freedom to determine the flow of LO and differentiation strategies, and 3) There are currently no guidelines or specific learning outcomes established in the field of mathematics for students with disabilities or exceptional intellectual and/or gifted abilities.

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