

学位論文の要旨 (論文の内容の要旨)
Summary of the Dissertation (Summary of Dissertation Contents)

論 文 題 目
Dissertation title

Research on Sociocultural Aspect of Mathematics Curriculum Development:
A Case of Mozambique National Curriculum

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Universality was an unshakable premise in mathematics education based on the universality of mathematics. “Mathematics for All” (MFA) was formed as a thematic group at the Fifth International Congress on Mathematical Education in 1984. This report made a case for the reconsideration of mathematics education from sociocultural aspect. The sociocultural aspect of mathematics education had been discussed academically for more than 30 years. In addition, it is closely linked to issues in the development of mathematics curriculum in developing countries. However, the term “sociocultural aspect” has not yet been clearly defined, and its meaning in each study is unclear, which has made it difficult to discuss them at the same level. The Globalization has progressed rapidly since the late 1990s, and has made the sociocultural aspect of mathematics education more complex and equipped it with new perspectives. Thus, it is difficult to advance the discussion on the sociocultural aspect of mathematics education without defining it and take a holistic view of the relationships between components that constitute it.

Based on the background above mentioned, this study did set two objectives: (1) Identify a framework and methodology for analyzing the sociocultural aspect of mathematics curriculum development. (2) Analyze the characteristics of the sociocultural aspect of Mozambique’s national mathematics curriculum development based on the framework. In addition, four research questions are addressed to achieve the objectives of this study: (i) What is the sociocultural aspect of mathematics curriculum development? What are its major components?, (ii) How is the sociocultural aspect of mathematics curriculum development analyzed? , (iii) What is the status of Mozambique’s mathematics curriculum development? , and (iv) What are the characteristics of Mozambique’s mathematics curriculum development with reference to global discourse?

This study has three major outcomes. First, the sociocultural aspect of mathematics curriculum development was defined, and concrete sociocultural components were identified by (research question (i)). Furthermore, a meta-analysis was conducted to understand the four sociocultural components using two journals, namely *ESM* and *JRME*, which have the highest impact factor among the academic journals that have uniform treatment of contents relating to mathematics education to analyze trend of study from the 1980s to nowadays. Second, a methodology for analyzing the mathematics curriculum was developed. The target and focus were clarified based on the structure of the intended curriculum (Baba, 2011). In addition, a methodology for analyzing mathematics curriculum revision process is developed based on the educational borrowing theory (research question (ii)). Third, the characteristics of the sociocultural aspect of Mozambique’s mathematics curriculum development were clarified by analyzing the (research question (iii and iv)). There are two main characteristics. First, the emphasis is on the local viewpoint. The most obvious characteristics compared to the global discourse is to place importance on the local perspective. Globalization has brought about the globalization of educational policies after the later 1990s. However, it can be regarded that Mozambique has trends such as to establish 20% of local curriculum in the 2004 curriculum revision, and to increase the number of schools that use local language for teaching by developing textbooks in the local language, which is reverse to the global trend. Second, the curriculum revision was based on locally gathered data. Global discourses

pointed out the trend of unifying mathematics curriculums. In addition, competencies specified in nations have become almost the same. On the other hand, Mozambique revised its curriculum by relying on local data while also placing importance on the SACMEQ III results in 2015. They introduced financial literacy as a component in the curriculum based on suggestions from social and economic groups. Curriculum was revised upon certain level of discussion in the own nation without direct acceptance of competency that is specified by the developed countries and international organizations.

This study is significant in that the sociocultural aspect of mathematics curriculum development was revealed based on previous studies. The ultimate goal is to achieve endogenous development of mathematics curriculum development in developing countries. In this sense, the clarification of the current status of mathematics curriculum development in Mozambique from the sociocultural aspect is a significant first step toward the goal. As a next step, it is necessary to clarify the meaning and value of localisation specifically as opposed to globalisation, which has been increasingly promoted recently. The localisation of mathematics curriculum development will not only be the antithesis of globalisation but will also create a synthesis by relating it to the sociocultural aspect of implemented curriculum, which has already been the subject of much research.

備考 論文の要旨はA4判用紙を使用し、4,000字以内とする。ただし、英文の場合は1,500語以内とする。

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