The Development of the Integrated Thematic Textbook

Alipin\textsuperscript{a}, Basuki Wibawa\textsuperscript{b}, \textsuperscript{a,b}Education Technology Studies Program, State University of Jakarta. Jl. Rawamangun Muka, Rawamangun, East Jakarta, Jakarta Raya, Email: \textsuperscript{a}alipin\_s3@mahasiswa.unj.ac.id, \textsuperscript{b}bwibawa@unj.ac.id

The problem presented in this paper is the need to revisit the integrated thematic textbooks that have been marketed and used in Indonesia. This needs to be done to determine the model of integrated thematic textbooks with ethnic, religious, racial, and indigenous that accordingly in Indonesia. However, the issue is based on two assumptions. The first assumption, the integrated thematic textbooks in Indonesia, as there are many publishers and several kinds such as private and government, and textbooks that are not only conventional but also electronic form. The second assumption, the standards of eligibility in Indonesia are established by the national body of education standards (BSNP). By comparing the integrated thematic models in several countries with integrated thematic models in Indonesia, the paper is offered an integrated thematic learning model that not only integrates subjects but integrates eight brain-compatible elements as a learning model. For that in the integrated thematic learning, eight brain-compatible elements are advised to be applied.

Key words: development, textbooks, integrated thematic.

Introduction

Education is one of the main factors that play an important role in the advancement of the nation that is continuing to improve. The efforts of these improvements and the improvement of the quality of education have been systematically conducted by the Government. The improvements are done in various ways, among others: through educators, school facilities, and the arrangement of learning support devices, one of which is a textbook with the latest edition and curriculum.

A unified thematic learning implementation of the 2013 curriculum is manifested in the form of interrelated textbooks for teachers and learners (Ferryka, 2017:174). Textbook procurement is a process closely related to the implementation of Curriculum 2013
So, it can be said that the integrated thematic textbook is a manifestation of the project implementation of Curriculum 2013, and is not denied that textbooks become another factor that support the successful implementation of Curriculum 2013.

In Indonesia, the role of the development of integrated thematic textbooks is in the hands of private publishers. This private issuer attempted to publish a textbook that was in accordance with the guidelines provided by the National Body of Education Standards (BSNP) under the Ministry of Education and Culture (Kemendikbud). Therefore, the speakers want to try to offer a model of brain-compatible learning that is appropriate for use in Indonesia.

**Literature Review**

**Integrated Thematic**

According to (Min, Rashid, & Nazri, 2012:273); (Stoian, 2016:104); (Varun & Venugopal, 2016:394); (Varun, 2014:49); (Andi Prastowo, 2014:52); (Hajar, 2013:21) thematic is an integrated learning model that uses themes to connect multiple subjects and can provide a meaningful experience for students. Whereas according to the Malaysia Curriculum Development Center (2003), as written by (Min et.al., 2012:274), Thematic is the integration between knowledge, skills, and values of learning and creative thinking using the theme. Added by (Björklund & Ahlskog-Björkman, 2017:1) that the thematic integration uses different areas of knowledge as well as some common phenomena used as a framework for developing knowledge and skills where some Learning objectives may arise.

By looking at the thematic definitions of some of the above studies it can be known that thematic is one of the integrated learning models based on certain themes that are contextual to the child's world. In line with the opinions of (Ciolan, 2003) in (Stoian, 2016:104), themes and skills in thematic have a strong relationship with the daily life of children and aim directly or indirectly to contribute to the formation of some values and attitudes.

Thematic is one type of integrated learning. Integrated learning is born from an integrated curriculum so that the existence of thematic learning models is closely related to the existence of an integrated learning model and is directly or indirectly closely related to the integrated curriculum (Andi Prastowo, 2014:59). Thematic integrated is one way for students to learn the theme of various perspectives and work with the source of information from various disciplines or content subjects (Armstrong & Dubert, 1995:2). It can then be defined that integrated thematic is a type of integrated learning that uses themes to associate (integrate and blend) several subjects to create a valuable experience for the students.
**Integrated Thematic characteristics**

The integrated thematic-based curriculum emphasizes the integration of all disciplines to bring the learning experience into the real world. It is structured so students are encouraged to undertake high-level learning and the development of the critical habits that students need to become lifelong learners (Randle, 2010:85). According to (Varun, 2014:49), curriculum fields are connected together and integrated in a theme so that there are many opportunities to communicate with peers, teachers, parents, and have strong community interactions in the learning process.

The integrated thematic based curriculum serves to provide an easy way for students to understand and deepen the concept of the material that is incorporated to enhance the spirit of learning because the materials learned are tangible or contextual material that have meaning for students (Darsono, Ambarita, Setianingsi, & Kadaryanto, 2018:130). A variety of complex and concrete experiences is essential for meaningful learning and teaching (Caine & Caine, 1991, Hal. 5) in (Varun, 2014:49).

Themes in an integrated thematic based curriculum must integrate language, content, and culture into activities that can prepare students to use them in various contexts. Thematic units can be incorporated into various concepts of the discipline into the area of the topic of interest and give students a reason to use the language into the disciplines studied (Varun & Venugopal, 2016:394). In the integrated thematic, all subjects and activities should have a primary focus on thematic ideas as well as binding into the main theme (John, 2015:175).

How to integrate the integrated thematic curriculum is to play a role in the assessment of the similarity of good pairs that do not relate systematically, such as soups and spoons. The integration serves as a more central process of evaluating abstract items in common because of their temporality, large variability, and relational properties (Wiener-Hastings & Xu, 2003:1236). The thematic curriculum also stipulates that the child should be studying in a home language or at least in a language familiar to the child. It is based on beliefs (and evidence recorded by various studies) that higher levels of achievement are achieved in literacy when children learn in a language that they already have a strong verbal command in (Altinyelken, 2010:154).

In the integrated thematic curriculum, learning should be used thematically with related texts at varying degrees of reading (easy readability, moderate readability, readability), each associated with the general idea of a theme. Using related texts, it is easy to make important questions that are relevant to the three texts that are aligned in the thematic units given (John, 2015:175).
Karlholm and Sevón (1990) in (Andi Prastowo, 2014:51-59) highlight the importance of the game in the form of thematic teaching. They believe that this game offers children the opportunity to process their experiences in various ways, which can contribute to children who have a deep understanding. Roskos and Christies (2012) in (Andi Prastowo, 2014:64) emphasized that in theme-based learning it is important for teachers to engage in children's games and encourage them to continue exploring and discovering a variety of phenomena.

The thematic approach aims to provide each child with an accessible and enjoyable activity that provides opportunities for occasional relief or intensive support through core and communication games (Varun, 2014:50). Thematic learning should be able to position the children into part of the learning in the theme of causation so that they know something right (Andi Prastowo, 2014:59).

There are nine principles that underly thematic learning, as expressed by Mamat SB, et al. (Andi Prastowo, 2014:59-63) as follows: (a) integrated with the environment or contextual; (b) have a theme as an instrument to unipress some subjects or study materials; (c) Using the principles of learning as you play and Joyful Learning; (d) Learning provides a direct, meaningful experience for learners; (e) Embed concepts from various subjects or study materials in a particular learning process; (f) separation or distinction between one lesson and the other is difficult to do; (g) Learning can evolve according to learners abilities, needs, and interests; (h) Learning is flexible; (i) The use of variation methods in learning.

The thematic units should provide vehicles for cognitive development that promote the development of vocabulary, reasoning, comparing/contrasting, abstraction, concept integration, and conceptual development (Baker, 2013:1). (Rule & Manuel T. Barrera, 2008:1-25) says that the integrated thematic unit taught should help learners connect ideas to form a cohesive knowledge structure in mind. More and more relationships are made between the idea, the complexity of the mind and the learning of increasing students (Sunal, Sunal, & Haas, 1996; Sunal et al., 2000) in (Hajar, 2013:43-54).

According to (Andi Prastowo, 2014:100-109), thematic learning has many characteristics. There are eighteen different types of characteristics, namely: (a) efficiency, efficiencies include the use of time, methods, and learning resources in an effort to provide a real learning experience to each student to achieve competence effectively; (b) Contextual, contextual learning approaches rely on real problems; (c) Student Centered, students must be active and teachers are to act only as facilitators; (d) Provide a direct experience (authentic), students must be faced with concrete learning; (e) The separation of blurred subjects, the teacher focuses on the discussion on the themes that are considered closest and related to the lives of the students; (f) Holistis, teachers should present concepts of various subject matter; (g)
Flexible, the learning process must be supple (should not be stiff); (h) Learning outcomes develop according to students interests and needs; (i) The learning activities are very relevant to the needs of Elementary/Madrasah Ibtidaiyah (MI) students; (j) Selected activities depart from students interests and needs; (k) Learning activities will be more meaningful; (l) Develop students thinking skills; (m) Presenting pragmatic learning activities that are appropriate to the problem; (n) Develop social interest in learners; (o) Active, thematic learning (integrated) emphasizes the activity of students in learning; (p) Using the principle of play while learning; (q) Develop student communications; (r) More emphasis on the process rather than results.

Methods

This Model of research is research and development (Borg and Gall, 2003:571) as modified by (Sukmadinata, 2013:164), is categorized into three steps, namely: (a) Preliminary study/exploration stage study; (b) Product development phase; (c) Product testing phase. The product development phase includes: (a) Early field-testing activities. Data obtained through observations and questionnaires were subsequently analyzed; (b) Revision of the Second product, revisions are based on preliminary field-testing activities; (c) Main field-testing activities; (d) The revised third product is based on the test results using the product in the main field test.

Results and Discussion

According to previous research results, the integrated thematic curriculum is an integrated learning model that uses themes to connect multiple subjects. It can provide a meaningful experience for students, has a strong relationship with children's daily lives, contributes to the formation of several values and attitudes, presents learning experiences to real-world-based students and gives them many opportunities to communicate with their peers, teachers, parents and the community. It provides tangible or contextual material that is meaningful to students, complex and concrete, integrating (language, content, and culture) into activities, using language that is familiar to children, using text thematically, using learning principles while playing and fun, and provides a direct, meaningful experience for learners.

From the various research results above, brain-compatible can represent the results of previous research. Besides, brain-compatible is the result of research that is now used in the developed countries of America. According (Kovalik & Olsen, 1994), brain-compatible elements are very suitable for the ethnic, religious, racial and indigenous values in Indonesia. The eight elements to be integrated into the integrated thematic system according to (Kovalik & Olsen, 1994:10-116) are: First, Absence of a threat; Integrated thematic learning environment must be safe, comfortable and students always uplifted. Do not create learning
that makes students feel down (like reading the multiplication table, mastering long division or being forced to read poetry). If students have negative feelings towards learning, then the students' cognitive learning will be impaired and learning will be futile. In creating a safe, comfortable and student site is always uplifted then: (a) The application of the curriculum must be meaningful, beneficial, relevant, with the opportunity to be creative and emotional; (b) There must be interactions relating between the teacher and the students; (c) The parameters are visible at all times (such as basic rule specifications, procedures, and general directives); (d) (students are actively and in assignment; direct instruction provides student involvement).

Second, the meaningful content; (a) Providing interactions there with the real world; (b) Ensuring that the curriculum is age-appropriate, can be understood by students, with the stages of its brain development; (c) Do not assume/require an experience that is not owned by the student; (d) offer content that excites students and teachers interest; (e) Ensure the curriculum meets the CUE criteria, namely: Creativity (and hence easy to remember), Useful (entry to the brain under a few “addresses”, one for every way that learners believe will be useful; this usability is greatly improved “retrievability” of information), creates an emotional bridge between the teacher and the student (and thus there is adequate epinephrine to bring the learning from short-term memory to long-term memory).

Third, Choice; students are allowed to choose their best way of resolving a problem. Fourth, Adequate time; the study must provide full time to the students, allowing students to take their time in the lesson. Fifth, enriched environment; in this case learning must immerse students in reality; Use direct source. Sixth, collaboration, in thematic learning there must be a collaboration between students and peers. During collaboration, the information processed during the collaboration must be meaningful from a student standpoint and provide real-life issues to solve, not a contrived worksheet practice.

Seventh, Immediate feedback.; The material should provide feedback directly to the students, in which case the feedback allows learners to judge for themselves whether they have mastered something or not. Feedback must contain real-world content that can be beneficial to students in their daily life. Eighth, Mastery (application), in learning there must be a demystification of judgment, the more real application of knowledge and skills, the more students can judge themselves whether they "Get It" or not and thereby assess their individual progress in mastery.

**Conclusion**

It is concluded that the integrated thematic textbook-based brain-compatible model is expected to work well with the ethnic, religious, racial and indigenous nature of Indonesia. It
is hoped that this brain-compatible conceptual development can help developers of integrated thematic textbooks in Indonesia. Secondly, this paper can enrich general readership information about the research and development of an integrated thematic textbook-based on the brain-compatible model. Third, for other researchers, this paper can be a reference and additional information and Encourage other researchers to do research and development related to the textbook Integrated thematic based Brain-compatible.

Acknowledgements:

The author thanked the Education Fund Management Board (LPDP) who have funded the international conference and to all parties who have helped in writing this article.
REFERENCE


