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THE CONCEPTUAL FRAMEWORK OF THE CURRICULUM OPERATIONAL BASED ON THE MULTIPLE INTELLIGENCES THEORYAND IT'S IMPLEMENTATION IN PANCA SETYA 2 ELEMENTARY SCHOOL SINTANG KALIMANTAN BARAT INDONESIA

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Abstract

Since 2013, Indonesia has used the 2013 curriculum as a national curriculum by carrying out a scientific approach in the learning process that prioritizes the possession of qualified scientific abilities. But until now, there are still indications that this scientific ability has not been able to increase optimally.The qualitative descriptive study in this article aims to provide a recommendation about the conceptual framework of the Operational Curriculum based on the Multiple Intelligences Theory to improve students' scientific abilities. The study was conducted on 20 teachers and 374 students from grade 1 to grade 6 at Panca Setya 2 Elementary School Sintang, West Borneo, Indonesia. The results showed that: 1) the application of an operational curriculum based on the multiple intelligences theory is shown by a) the average score of teacher activity is 82.25% with very good criteria, b) the average score of the implementation of scientific learning activities of students is 75.33% with very good criteria, c) the average score of scientific learning activities facilitated by the operational curriculum based on the multiple intelligences theory is 75.70% with very good criteria; 2) the effectiveness of the used of the operational curriculum based on the multiple intelligences theory is shown by a) the value of the learning outcomes criteria set is 75, b) the average value of student learning outcomes is 82.70 c) the operational curriculum based on multiple theories is said to be effective because the average value of student learning outcomes is above the learning outcomes criteria set by the school; 3) improvement of students' scientific abilities indicated by a) the average score of students' scientific self-assessment is 66.92% with good criteria, b) the average score of students' scientific activities is 76.27% with very good criteria; c) operational curriculum with multiple intelligences theory approach can improve students' scientific abilities because the average score of students' scientific activities is higher than the average score of students' scientific self-assessment.

Keywords: *operational curriculum, multiple intelligences theory, scientific abilities*

INTRODUCTION

The phenomenon of education that occurs both nationally and globally will not be separated from the role of the curriculum. Indonesia itself has made several curriculum changes, including curriculum 1947, 1964, 1968, 1973, 1975, 1984, 1994, 1997, 2004, 2006, and finally 2013. A brief chronology of the curriculum changes that occurred in Indonesia, namely Lesson Plans (Detailed in the Decomposed Lesson Plan) in 1947, was the first

curriculum in Indonesia after independence and had not used the term curriculum; Lesson Plan (elementary school education) in 1964, still does not use the term curriculum; The Curriculum in 1968 was the first integrated curriculum in Indonesia where several branches of social science were integrated in Social Sciences and several branches of natural science integrated in Natural Sciences which are now called science; The Curriculum in 1973 is The Pioneer of Development School Project Curriculum (PPSP); The curriculum in 1975, the curriculum is structured in very detailed columns; The Curriculum in 1984 was an improvement of the curriculum in 1975; The Curriculum in 1994 is a refinement of thecurriculum in 1984; The curriculum in 1997, is a revision of the curriculum in 1994; The Competency Based Curriculum (KBK) in 2004, is a pilot curriculum; The School based Curriculum (KTSP) in 2006, is curriculum developed by BSNP (National Education Standards Agency); and The Curriculum 2013 (K13 or Kurtilas), this curriculum that emphasizes competency based attitudes, skills and knowledge to produce productive, creative, innovative, affective Indonesian people through strengthening integrated attitudes, skills and knowledge.

There are indications that the scientific abilities of Indonesian students are still lacking, so it is expected that students' scientific abilities can increase through the implementation of the curriculum 2013.Regardless of the history of curriculum changes that occur in Indonesia, if we talk about the curriculum certainly cannot be separated from the phenomenon of education that occurs, namely the phenomenon of learning carried out in schools with many things still found that do not reflect the real learning process, where students should be given freedom to be able to develop self-potential and self-abilities. Taba (1962: 28) as one of the leaders in the curriculum development study suggested that centering educational effort on the development of all the power of the individual. "All the power of the individual" can be in the form of self-potential and ability. Therefore the educational process carried out must really be able to develop self-potential and self-ability.

The potentials possessed by students, it's can be the Multiple Intelligences (Multiple Intelligences) and the abilities possessed by students, it's can be the ability to carry out scientific activities known as scientific abilities that are one of the characteristic of learning in the 2013 curriculum. Multiple intelligences consist of nine intelligences namely musical intelligence, bodily kinesthetic intelligence, mathematical-mathematical intelligence, linguistic intelligence, visual spatial intelligence, interpersonal intelligence, intrapersonal intelligence, and naturalistic intelligence, and existential intelligence; and the scientific

abilities include observing, questioning, exploring/experiment, associating, and communicating abilities.

The author himself who has been work in education area since 2006 found the facts about process of education that occurred in several schools in Indonesia, especially in Sintang, West Kalimantan. The author highlights the facts that occur in some elementary schools. The facts found by the author while observing are the lack of attention of the teacher to the self-potential of the students where the teacher ignores the greatest potential in students and discrimination in the learning process which indirectly divides students into categories with a smart and non-intelligent range, it'sstill go on. Another fact found by the author when observing is the scientific activities involving scientific abilities in the learning process are still rarely carried out by the teacher and there are some teachers who take and use only one component of scientific activity, it is found too that the teacher uses singular intelligence as an approach to the learning process. The fact that this happened is a little inconsistent with what was stated earlier that education is a forum to help students develop their potential and abilities and provide knowledge to deal with challenges that occur in everyday life. Though the success of education is determined by the processes that occur in education itself. If the process that occurs in education experiences inequality, the results of education itself will also be lame.

The success of an educational process can be seen from what outcomes students have. One of the outcomes of the education process are the competences. This can be in the form of scientific abilities which will lead to affective, psychomotor and cognitive abilities. Sometimes in the learning process there is a demand for a final value that reflects only cognitive values while the portion for affective and psychomotor is less attention, whereas cognitive, affective and psychomotor, they are capabilities that must be possessed by students and this abilities are also holistic. To arrive at a cognitive, affective and psychomotor unit, the way can be do is invite students to conduct scientific activities involving the potential of multiple intelligences in the learning process, so it that can be improve the scientific abilities of students who later boils down to cognitive, affective and psychomotor abilities.

The education process is inseparable from the role of the curriculum. Educational activities cannot work properly without a curriculum. The curriculum is the body of a kinematics and the dynamics of education which implies that education is not constant but experiences movement and change, following the development of science, technology and information which it also experiences movement and change from time to time. The

definition of curriculum in Indonesia refers to what is stated in Law Number 20 of 2003 concerning the National Education System. In article 1 of the Law, the curriculum is defined as "a set of plans and arrangements regarding the purpose, content, and material of learning and the methods used to guide the implementation of learning activities to achieve certain educational goals." That it make curriculum called body of education, so the education cannot be carried out without the curriculum as the core implementation of education.

Oliva as one of the curriculum experts embraces several notions of the curriculum in the form of interpretations. Oliva (2013: 4) namely: curriculum is that which is taught in school, curriculum is as set of subject, curriculum is content, curriculum is a program of studies, curriculum is a set of material, curriculum is a sequence of courses, curriculum is a set of performance objectives, curriculum is a course of study, curriculum is everything that goes on within the school, including extra-curriculum is class activities, guidance, and interpersonal relationships, curriculum is that which is taught both inside of school and outside of school, directed by the school, curriculum is everything that is planned by school personnel, curriculum is a series of experiences undergone by leaner's in school, and curriculum is that which an individual learner experiences as a result of schooling. In contrast to the interpretations summarized by Oliva, Print (1993: xvii) argues that the curriculum is "planned learning opportunities" offered by the organization to learn and experience the curriculum implemented ".

Taba (1962: 10) views the curriculum as a systematic design which consists of several elements, namely the purpose, content, learning process and evaluation by suggesting that "all curricula, no matter what their particular design, are composed of certain elements. Information and objectives of specific objectives; it indicates some selection and organization of content; it either implies manifestations of learning and teaching, whether because of their demand objectives because the content organization requires them. Finally, it has a program of evaluation of outcomes. "Whereas Beauchamp (1975: 7) saw the curriculum as a written document by arguing that "a curriculum is a written document which may contain many ingredients, but basically it is a plan for education in pupils during their enrollment in a given school".

The curriculum can be seen as something that gives rise to competition to be the best. This was stated by Zais (1976: 7) by saying that "curriculum is a racecourse of subject matters to be mastered". According to Schubert's study (1986: 26-33), the diversity of curriculum meanings is summarized in eight faces of the curriculum or what he calls the

"images of curriculum", namely: Curriculum meaning subjects (content or subject matter), programs or planned activities, expected learning outcomes (intended learning outcomes), cultural reproduction, experience, assignments and certain concepts (discrete task and concept), agenda for social reconstruction, and track through (curere).

The fundamental question that arises in the mind of the writer when talking about the curriculum in the classroom level is reveals when the Lesson Plan is applied in the learning process transformed into the Real Learning Implementation. Teachers are sometimes surprised about what them to found that the Lesson Plan was designed when it used in the classroom learning process experiences incompatibility,so the teacher as the only curriculum decision-making in the classroom level do performs a change it at that time to suit the needs. Unfortunately, at the end of learning this is neglected and not documented so that it can happen again and again, it's not match to the core success of the learning process is the Real Implementation of Learning that occurs. Of course the real implementation of this learning occurs naturally without conditioning. This is a phenomenon that is in accordance with what was said by Ornstein & Hunkins (2009) relating to the planed curriculum and unplanned curriculum which raises the existence of an operational curriculum (the operational curriculum emerges in the classroom as a result of the actual situation and requires that make adjustments as needed). In other words the Lesson Plan changes into the Real Learning Implementation when the learning process in the class takes place. In the Real Process of Learning Implementation, the Operational Curriculum which is made by the teacher concerned to suit the situation and conditions of learning right at that time and the operational curriculum is not a Lesson Plan.

METHOD

This research is a qualitative descriptive study, which focuses on the operational curriculum framework based on the theory of multiple intelligences and its implementation in elementary schools. There are three important things that are in the spotlight of research are 1) the application of an operational curriculum based on the theory of multiple intelligences, 2) the effectiveness of the operational curriculum based on the theory of multiple intelligences, and 3) improvement of students' scientific abilities; andthe research data are a) observation of teacher activity, b) observation of the implementation of scientific learning activities of students, c) observation of scientific learning activities facilitated by the operational curriculum based on the theory of multiple intelligences, d) Criteria for completeness of learning outcomes set by the education and school offices, e) student

learning outcomes, f) student self-scientific assessment questionnaire, and g) observation of students' scientific activities.

The research sites were selected by random sampling of the total number of schools in the Primary Education level was SD / MI in Sintang, West Kalimantan, Indonesia and based on data from the education and cultural ministries, there were 39 schools in the Basic Education level consisting of 29 Public Elementary Schools and 10 Private Primary Schools. The results of the random sampling where the study was obtained by the school were the source of the data, namely Panca Setya 2 Primary School in Sintang, West Kalimantan, Indonesia. SD Panca Setya 2 Sintang has 20 teachers consisting of 6 class teachers and 14 study teachers and has a total number of students, namely 374 students consisting of Grade 1stare 67 students (1A class are 23 students, 1B class are 22 students, and 1C class are 22 students), Grade 2ndare 69 students (2A classare 23 students, 2B class are 23 students, and 2C class are 23 students),Grade 3rdare 56 students (3A classare 28 students and 3B class are 28 students), class 4thare 56 students (4A class are 28 students and 4B class are 28 students), Grade 5thare 71 students (5A class are 24 students, 5B class are 24 students and 5C class are 23 students), and Grade 6thare 55 students (6A class are 28 students and 6B classare 27 students). The research subject are grouped into three categories: low class (grade 1 and grade s 2), middle class (grade 3 and grade 4) and high class (grade 5 and grade 6). Data collection is carried out at the last of semester 2, April until May 2018.

The operational curriculum framework based on the theory of Multiple Intelligences is obtained through observation of student activities and teacher activities as well as data of the self-Multiple Intelligences of students. The implementation data's of the operational curriculum based on multiple intelligences theory are indicated by the scores of teacher activity and the teacher activity criteria's; the average score of scientific learning activities and the scientific learning activities criteria's; and average scientific learning activities facilitated by the operational curriculum based on the multiple intelligences theory and its criteria. The effectiveness data's of the operational curriculum based on the theory of multiple intelligences is shown by comparing the value of the Learning Outcomes Criteria that are set by the education department and school with the average value of student learning outcomes. The improvement of students' scientific abilities is indicated by comparing the average scores of students' scientific self-assessments and the criteria with the average scores of students' scientific activities and their criteria.

RESULT AND DISCUSSION

The operational curriculum word's has been viral in the history of curriculum in Indonesia, when The School Based Curriculum (Kurikulum Tingkat Satuan Pendidikan/KTSP) was implemented in 2006 as the national curriculum. The definition of the KTSP curriculum is outlined in full in the Indonesia government regulation Number 19 of 2005 Article 1 paragraph 15 which reads The School Based Curriculum (KTSP) is an operational curriculum prepared and implemented in each education unit. This has an impact on the meaning of the operational curriculum to be narrow, especially for education practitioners in Indonesia who are not involved in the curriculum study area.

When hearing the word operational curriculum, education practitioners, especially in Indonesia who are not involved in the curriculum area, will immediately induce it with a national curriculum that has been applied in Indonesia, namely KTSP, and perhaps the operational curriculum is identified with the Lesson Plan. There is a misconception here, which forgets that KTSP is a form of operational curriculum as a macro curriculum and the real forms of operational curriculum in micro view, namely when the learning process takes place both in class and outside the classroom which involves interaction between teacher and students and lesson plans made by the teacher before the implementation of learning, and at that time there was an operational curriculum automatically. In addition, misconceptions also occur by saying that the lesson Plan (Rencana Pelaksanaan Pembelajaran/RPP) is an operational curriculum and forgets the fact that the lesson plan is in the realm of the instructional curriculum because it contains learning plans that are systematically arranged as a guide in the learning process while the learning process takes place, the lesson plan is very flexible with regard to changes if the lesson plan is not appropriate to the situation and conditions that occurred at that time.

Large Dictionary of the Indonesian Language (Kamus Besar Bahasa Indonesia/KBBI), the operational word comes from the basic word namely operation, interpreted as something related to an activity carried out by a person or body in a particular field, while the operational word is an adjective from the basic word of operation. From this definition of words based on KBBI, it can be concluded that the operational word is defined as an activity carried out by a person or entity working in a particular field. When the operational word is inherent in interpreting something, it cannot be said that the word becomes the standard of ownership of the matter as happened in the meaning of KTSP. It is

not right to say that the Operational Curriculum is the property of KTSP because the operational curriculum itself has its own meaning.

The term operational curriculum appears in the writings of Ennis (1986) which introduces operational curricula that consist of the events, interactions and strategies that occur in the classroom as well as only one decision making and personal meaning foundation. Not long after Ornstein & Hunkins (2009: 17) who published his first book in 1988 quoted Eisner as said that "the operational curriculum emerges in the classroom as a result of the actual situation and requires teachers to make adjustments as needed and Ornstein & Hunkins also confirms that the teacher brings their own knowledge, experiences and dispositions to the curriculum and modify it to fit. In addition, Posner (1992: 10) argues that operational curriculum consists of what students are aware of, how students know that it counts (actual curriculum practices and tests). Raka Joni (2000) suggests the definition of an operational curriculum, namely the objective manifestation of the intention of an instructional curriculum in the form of learning interactions. Remillard (2005) suggests that operational curriculum is look like curriculum uses involves a participatory relationship between the teacher and the curriculum, which in its nature is an interaction between the teacher and the curricular resource. In his article Alagbe (2014) states that "operational curriculum is actual curriculum that is intended to be a curriculum for students, activities and purpose is a particular set of students at particular time ". Similar but not the same as suggested by Alagbe, Chen (2015) suggests that "operational curriculum based adaptation based on their pedagogical content knowledge (it is specific knowledge of how to teach content in specific contexts)". Even long before, Kuslan and Stone (1968: 164) as education practitioners defined the curriculum and indirectly the curriculum definition he put forward was leading to the definition of an operational curriculum, namely "the curriculum is the total activity class, the teacher's own intellectual and personality resources are the real vitals of curriculum."

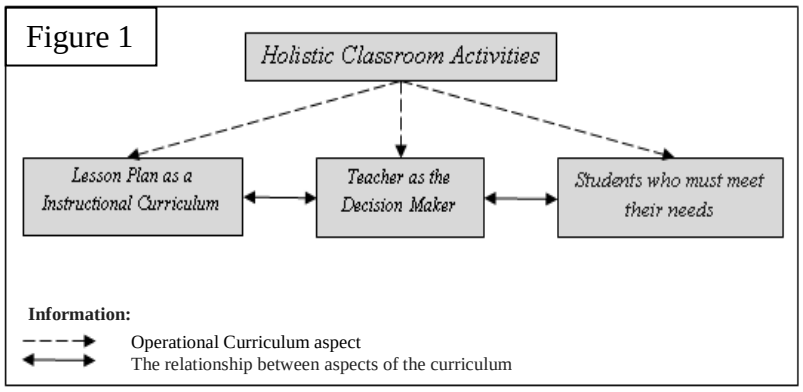
By looking at some of the definitions presented, the operational curriculum cannot also be said as a lessonplan. Posner (1992: 10-12) says that the curriculum is documented in the scope and sequence charts, syllabi, curriculum guides, course outlines and list of objectives (curriculum described in formal documents) and in this case it is clear that lessonplan is not an operational curriculum. The operational curriculum is a "curriculum-in-use is the actual curriculum that is delivered and presented by each teacher". When an unexpected mismatch occurs during the learning process, the teacher as the only curriculum decision-making at the classroom level will modify the lessonplan that was previously

designed right at that time to match the situation and conditions that occurred in the class at that time. Therefore the lesson plan is more accurately said as an instructional curriculum.

The operational curriculum is very closely related to the activities that occur in class when the learning process takes place. Print (1993: 17-19) said that, "the teacher participates in a multiplicity curriculum activity at the classroom, which is the most effective to be developed, as the adapter to interpreted and changed the curriculum to meet the needs of students, as the developer to design and develop a curriculum for student needs, and as a researcher who involved in research and curriculum reflection." Thus the operational curriculum is the whole activity carried out in the classroom which involves interaction between the teacher and the instructional curriculum in the form of lesson plan and the interaction between the teacher and students, and when the learning process takes place, the teacher acts as curriculum decision-making so that the learning process takes place according to the needs of the student at that time. The interaction between teacher and instructional curriculum (lesson plan), show up when the teacher implements the lesson plan and at that time the teacher adjusts the lesson plan to align with the actual needs of students. While teacher and student interactions in the learning process are reciprocal relationships that influence each other. The operational curriculum is viewed in terms of the use of a curriculum in which the curriculum involves participatory relations between the teacher and the curriculum, which are the interactions between teachers and curricular resources. Curricular resources in question are existing curriculum documents and when in the classroom teachers become policy holders in implementing the curriculum contained in lesson plan.

The operational curriculum is the entire actual activity of the learning process that takes place in the classroom that involves interaction among lesson plan, teacher and students. Lesson plan as an instructional curriculum, teachers as decision makers and students whose needs must be met. Briefly, operational curriculum is defined as holistic classroom activities. Activities carried out in the classroom must lead to the achievement of learning objectives, activities carried out in the classroom must be filled with science and technology, activities carried out in the classroom must be carried out scientifically and activities carried out in the classroom must be measurable and outward. The operational curriculum chart is simply shown in figure 1.

Figure 1



It was said that each curriculum has a development foundation, including the operational curriculum. There are five operational curriculum bases, they are philosophical foundation, psychological foundation, social foundation, theoretical foundation, and technological foundation. And, there are 2 patterns of operational curriculum orientation that are centered on child-centered and experience-centered. The foundation chart and orientation of the operational curriculum are shown in Figure 2.

Figure 2

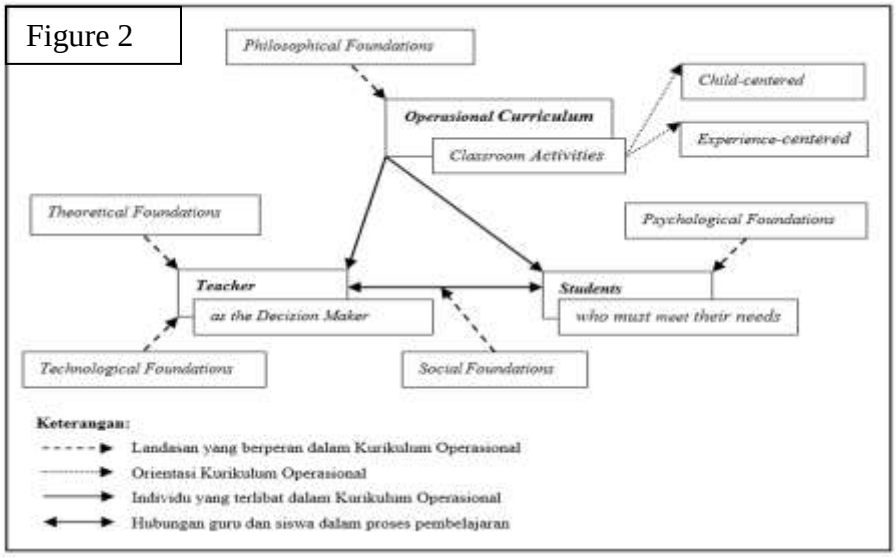


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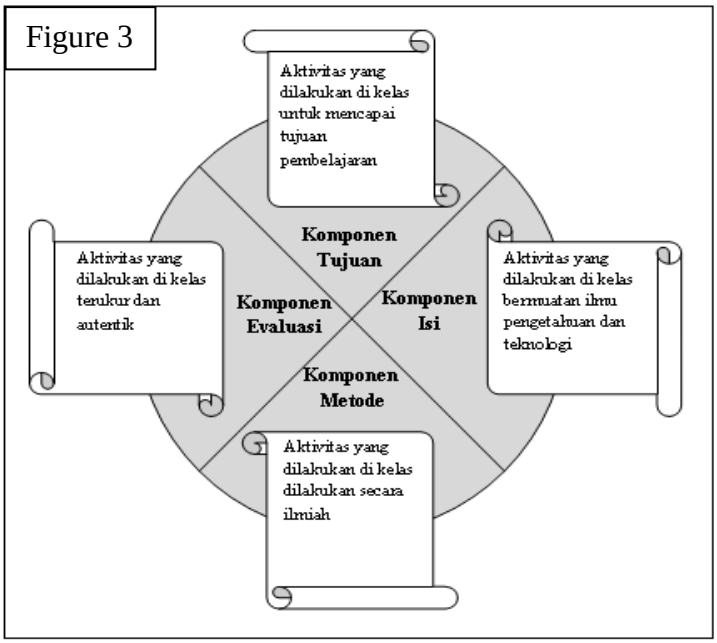
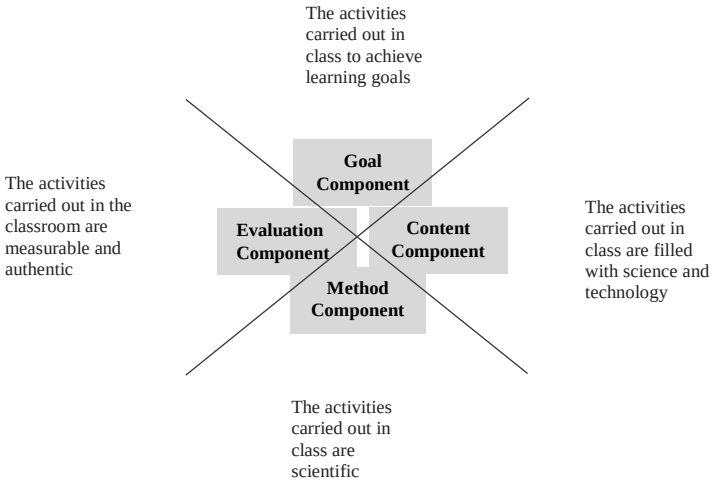
Figure 3



Information:

The Operational Curriculum foundation
The Operational Curriculum orientation
The Operational Curriculum members
The relationship between teacher and student in learning process



The operational curriculum refers more to the grass roots model that has a down top pattern and also, refers to humanistic theories. In the operational curriculum, the teacher is the main driving force in the learning process that occurs in the classroom. The teacher will act immediately to make adjustments according to the pedagogy abilities of the teacher if there is a mismatch between what is planned and what happens when the learning process takes place. And in terms of making these adjustments, the teacher prioritizes the interests of students and fulfills the needs of students so that the learning process that takes place has an impact on the meaningful learning process and the learning outcomes achieved optimally.

The operational curriculum is the only curriculum that is directly in the position of implementation because the operational curriculum itself is an activity that occurs in the learning process that takes place in the classroom. Learning activities contained in a Lesson Plan as a form of instructional curriculum, but when implemented in the classroom the learning activities are said to be an operational curriculum. The humanistic theory that forms the basis of the operational curriculum is the multiple intelligences theory pioneered by Howard Gardner.

Multiple Intelligences in Indonesian is translated as "kecerdasan majemuk" or "kecerdasan ganda". There is nothing wrong with this translation, it's just that as an education practitioner, the author prefers to use Multiple Intelligences to remain in English or replace it with the word multi intelligence or "multi kecerdasan". The concept of Multiple Intelligences makes educators wiser to see differences of student, and make student feel more welcome and served. This concept "erases" the myth of smartstudent and not smart student, because according to this concept, all children are essentially smart. Gardner defines intelligence as a pluralistic ability that is able to handle the content of specific problems that occur in the world. It is said that each person has at least eight or nine types of intelligence at different levels. These multiple intelligences are mapped into intelligences namely musical intelligence, bodily kinesthetic intelligence, logical-mathematical intelligence, linguistic intelligence, visual spatial intelligence, interpersonal intelligence, intrapersonal intelligence, and naturalistic intelligence, and existential intelligence.

Since 2013, Indonesia no longer uses the KTSP curriculum, KTSP has been replaced with a new curriculum, namely the 2013 curriculum or K13 or Kurtilas. 2013 curriculum can be said to be born in the same year, namely 2013. In that year only a few schools were designated as pioneer schools in implementing the curriculum. And starting in July 2017 the 2013 curriculum is truly applied nationally. The enactment of the 2013 curriculum in Indonesia brings new changes to the learning process that uses a scientific approach. The learning process using the scientific approach is said to be scientific learning and scientific learning is used not only in science subjects but also in other subjects. At the Elementary School level, learning activities are minds-on and hands-on. Therefore, the use of scientific methods at the Elementary School level must be minds-on and hands-on.

This scientific learning is regulated in the Minister of Education and Culture Regulation Number 65 of 2013 concerning Basic and Secondary Education Process Standards that have hinted at the need for a learning process guided by scientific/scientific approaches. The

application of the scientific / scientific approach in the learning process is often cited as a distinctive feature and becomes a distinctive force of the existence of the 2013 Curriculum. The use of scientific methods as one of the learning characteristics carried out by the 2013 curriculum requires the commitment of teachers to be able to implement it in the learning process. Therefore, the teacher is obliged in terms of familiarizing students as students using the scientific method (scientific method) which will have an impact on the scientific abilities they have. Through the scientific method, students as students will have a scientific attitude such as careful observation and exploration, have a sense of curiosity (what, how, why), objective thinking, critical and open, trace in thinking, honest, obedient and responsible .

In the Minister of Education and Culture Regulation No. 67 of 2013 concerning the basic framework and curriculum structure of SD/MI, education is rooted in national culture to build the life of the nation today and in the future, students are inheritors of creative national culture, education is aimed at developing intelligence intellectual and academic brilliance through disciplinary education, education to build a better and more present life in the past with a variety of intellectual abilities, communication skills, social attitudes, caring, and participating to build a better life for the people and nation. Scientific activities are set forth in the Minister of Education and Culture Regulation Number 81a of 2013, which is the activity of observing that the teacher opens widely and varies the opportunity of students to make observations through activities: seeing, listening, listening, and reading; questioning activities are asking questions about information that is not understood from what is observed or questions to get additional information about what is observed (starting from factual questions to hypothetical questions); the activity of collecting information is done through experiments, reading other sources besides textbooks, observing objects or events, interviewing activities with resource persons and so on; communicating activities are conveying the results of observations, conclusions based on the results of the analysis verbally, in writing, or other media.

There is an expression that "the best curriculum is a capable teacher". That is, without a curriculum plan even if the teacher knows what to do and how to do it, education will work well. Of course there are pros and cons about the phrase. But if the phrase is true, it does not mean the importance of the curriculum being ignored. The curriculum is not made to replace the role of a capable and adequate teacher, whereas the curriculum is structured to assist the teacher's task in designing classroom learning activities. Because, even with the curriculum, the demand for the skills of a teacher is absolutely necessary for educational success. The

difference in the way of looking at education issues makes education experts have different concepts regarding the curriculum. However, all are oriented towards the realization of quality education. Therefore, as long as they have a clear and consistently implemented concept, a good curriculum (of course, the word 'good' here means relative) can deliver an educational process to get the best results.

The curriculum cannot be separated from political influence, both at the state, regional and even to the school level. But it will be different if the curriculum in question is an operational curriculum. Although the operational curriculum is based on the national curriculum, the teacher is the holder of the operational curriculum control. This curriculum only involves teacher and student relations that interact in the form of a learning process, the scope is very internal because it only occurs in the classroom where the teacher and students interact during the learning process. The teacher is the only holder of the operational curriculum and everything that happens in the classroom in the form of real implementation of learning (not in the form of learning implementation plans) is highly dependent on meeting the needs of students. Thus, in short, it can be said that the operational curriculum is a curriculum in the form of real learning activities that involve interactions between teachers and students and lesson plans.

The operational curriculum structure consists of five main things, namely introduction, scope, material, learning and evaluation processes. These five main things are always present in every meeting in learning. As the name implies, the introduction is a pawn determinant of learning activities carried out because the learning process in the operational curriculum is natural (occurs without settings) and the main key is forming students to be ready to carry out learning activities. The scope of the operational curriculum is a limitation regarding the subject matter that will be taught by the teacher and learned by students in the learning process. Learning material in the operational curriculum is a fraction of the subject matter that is flexible to the situation and condition of students when learning takes place. The process in the operational curriculum is a student activity carried out during the learning process that is closely related to the use of theories, models, approaches, methods, strategies, techniques and learning tactics. And evaluation in the operational curriculum is conducted to find feedback on the learning process that has been carried out.

Table 1. Operational Curriculum Framework			
No	**Structure**	**Activities**	**Purpose**
1	Introduction	Teacher cheer up the students	to establish situations that make students ready for learning
2	Scope	Teacher make route map about material	to know the limits of the material and its relation to each other
3	Contents	Teacher make sequence materials	to know the material prerequisites and mapping materials
4	Process	Teacher do in the classroom: – Musical – Bodily – Logical – Linguistic – Visual – Interpersonal – Intrapersonal – Naturalistic – Existential Student do in the classroom: – Observing – Questioning – Associating – Experimenting – Networking	to facilitate and help the student in learning to improve and develop the competencies affective, psychomotor and cognitive using scientific method
5	Evaluate	Teacher make and do authentic evaluation	to find out the competency achievement of affective, psychomotor and cognitive

Data retrieval carried out at Panca Setya 2 Elementary School 2 Sintang West Indonesia for 20 teachers and students from grade 1 to grade 6 which totaled 374 students about the operational curriculum and its implementation generally provided evidence that the real implementation of learning is the key to the learning process that later produce output and outcomes. When the real implementation of learning, lesson plans made by teachers become very flexible with regard to changes due to various factors, both intrinsic factors and extrinsic factors related to students that occur right when the learning process takes place.

The data on the implementation of the operational curriculum based on the theory of multiple intelligences is shown through the results of teacher activity analysis in table 1, the results of the analysis of students' scientific learning activities in table 2 and the analysis of scientific learning activities facilitated by the operational curriculum based on the multiple intelligences theory in table 3.

Table 1. Analyses Result Teacher Activities									
No	**Teacher Initial**	**Learning Activities**						**Holistic Activities**	
		Preface		**Core**		**Ending**			
		%	**Criteria**	**%**	**Criteria**	**%**	**Criteria**	**%**	**Criteria**
1	G1	71.43	Good	86.67	Very Good	75	Very Good	80	Very Good
2	G2	85.71	Very Good	80	Very Good	75	Very Good	80.24	Very Good
3	G3	71.43	Good	80	Very Good	75	Very Good	75.48	Very Good
4	G4	85.71	Very Good	73.33	Good	75	Very Good	78.02	Very Good
5	G5	85.71	Very Good	80	Very Good	75	Very Good	80.24	Very Good
6	G6	71.43	Good	73.33	Good	75	Very Good	73.25	Good
7	G7	85.7	Very	73.33	Good	100	Very	86.35	Very

		1	Good				Good		Good
8	G8	85.71	Very Good	73.33	Good	75	Very Good	78.02	Very Good
9	G9	71.43	Good	86.67	Very Good	50	Good	69.37	Good
10	G10	85.71	Very Good	73.33	Good	75	Very Good	78.02	Very Good
11	G11	85.71	Very Good	93.33	Very Good	75	Very Good	84.68	Very Good
12	G12	85.71	Very Good	86.67	Very Good	100	Very Good	90.79	Very Good
13	G13	71.43	Good	93.33	Very Good	75	Very Good	79.92	Very Good
14	G14	100	Very Good	100	Very Good	100	Very Good	100	Very Good
15	G15	85.71	Very Good	80	Very Good	75	Very Good	80.24	Very Good
16	G16	71.43	Good	86.67	Very Good	100	Very Good	86.03	Very Good
17	G17	100	Very Good	73.33	Good	75	Very Good	82.78	Very Good
18	G18	85.71	Very Good	93.33	Very Good	100	Very Good	93.02	Very Good
19	G19	85.71	Very Good	86.67	Very Good	100	Very Good	90.79	Very Good
20	G20	71.43	Good	86.67	Very Good	75	Very Good	77.70	Very Good
Mean		**82.14**	**Very Good**	**83.00**	**Very Good**	**81.25**	**Very Good**	**82.25**	**Very Good**

Teacher activity is a learning activity carried out by the teacher relating to the implementation of the Learning Implementation Plan to become Real Learning Implementation. In Table 1 it can be seen that the overall implementation of the Learning Implementation Plan becomes Real Learning Implementation seen in the average teacher activity that is 82.25% with very good criteria. In other words it can be said that the teacher concerned can implement the Learning Implementation Plan in the Real Form of Learning Implementation with very satisfying results.

Table 2. Analyses Resultof Implementation of Student Scientific Activities

No	Grade	Observing		Questioning		Experimenting		Associating		Communicating		Mean (%)	Criteria
		%	Criteria	%	Criteria	%	Criteria	%	Criteria	%	Criteria		
1	Under Class 1A	75.00	Very Good	75.00	Very Good	75.00	Very Good	100.00	Very Good	75.00	Very Good	80	Very Good
2	Under	75.00	Very Good	75.00	Very Good	75.00	Very Good	100.00	Very Good	100.00	Very Good	85	Very Good

	Class 1B												
3	Under Class 1C	75.00	Very Good	75.00	Very Good	75.00	Very Good	75.00	Very Good	50.00	Good k	70	Good
4	Under Class 2A	50.00	Good	75.00	Very Good	75.00	Very Good	75.00	Very Good	75.00	Very Good	70	Good
5	Under Class 2B	75.00	Very Good	75.00	Very Good	50.00	Good	75.00	Very Good	75.00	Very Good	70	Good
6	Under Class 2C	100.00	Very Good	75.00	Very Good	50.00	Good	100.00	Very Good	75.00	Very Good	80	Very Good
7	Middle Class 3A	100.00	Very Good	75.00	Very Good	100.00	Very Good	50.00	Good	75.00	Very Good	80	Very Good
8	Middle Class 3B	75.00	Very Good	75.00	Very Good	50.00	Good	100.00	Very Good	75.00	Very Good	75	Very Good
9	Middle Class 4A	75.00	Very Good	50.00	Good	75.00	Very Good	100.00	Very Good	75.00	Very Good	75	Very Good
10	Middle Class 4B	75.00	Very Good	50.00	Good	75.00	Very Good	75.00	Very Good	75.00	Very Good	70	Good
11	Upper Class 5A	75.00	Very Good	100.00	Very Good	50.00	Good	75.00	Very Good	75.00	Very Good	75	Very Good
12	Upper Class 5B	75.00	Very Good	50.00	Good	75.00	Very Good	100.00	Very Good	75.00	Very Good	75	Very Good
13	Upper Class 5C	75.00	Very Good	75.00	Very Good	100.00	Very Good	50.00	Good	75.00	Very Good	75	Very Good
14	Upper Class 6A	75.00	Very Good	75.00	Very Good	100.00	Very Good	75.00	Very Good	50.00	Good	75	Very Good

15	Upper Class 6B	75.00	Very Good	75.00	Very Good	75.00	Very Good	75.00	Very Good	75.00	Very Good	75	Very Good
Mean		**76.67**	**Very Good**	**71.67**	**Good**	**73.33**	**Good**	**81.67**	**Very Good**	**73.33**	**Good**	**75.33**	**Very Good**

The implementation of students' scientific activities is the implementation of scientific activities of students as stated in the Learning Implementation Plan into the actual scientific activities of students. In Table 2 it can be seen that the implementation of students 'scientific activities is seen in the average implementation of students' scientific learning activities which is 75.33% with very good criteria. In other words it can be said that the scientific activities of students contained in the Learning Implementation Plan can be carried out with very satisfying results.

Scientific learning activities facilitated by the operational curriculum based on the multiple intelligences theory are scientific learning activities in the frame of the operational curriculum based on the theory of multiple intelligences. In table 3 it can be seen that the average score of scientific learning activities facilitated by the operational curriculum based on the multiple intelligences theory is 75.70% with very good criteria. In other words it can be said that a multiple intelligences theory of operational curriculum can facilitate scientific learning activities.

Table 3. Analyses ResultScientific LearningFacilitated by The Operational CurriculumBased on Multiple Intelligence Theory

No	Grade	Observing		Questioning		Experimenting		Associating		Communicating		Mean (%)	Criteria
		%	Criteria	%	Criteria	%	Criteria	%	Criteria	%	Criteria		
1	Under Class 1A	77.78	Very Good	88.89	Very Good	66.67	Good	77.78	Very Good	66.67	Good	75.56	Very Good
2	Under Class 1B	88.89	Very Good	55.56	Good	66.67	Good	77.78	Very Good	77.78	Very Good	73.33	Good
3	Under Class 1C	66.67	Good	66.67	Good	77.78	Very Good	77.78	Very Good	77.78	Very Good	73.33	Good
4	Under Class	66.67	Good	88.89	Very Good	66.67	Good	66.67	Good	88.89	Very Good	75.56	Very Good

	2A												
5	Under Class 2B	77.78	Very Good	55.56	Good	55.56	Good	77.78	Very Good	55.56	Good	64.44	Good
6	Under Class 2C	66.67	Good	77.78	Very Good	66.67	Good	77.78	Very Good	66.67	Good	71.11	Good
7	Middle Class 3A	88.89	Very Good	55.56	Good	66.67	Good	77.78	Very Good	66.67	Good	71.11	Good
8	Middle Class 3B	66.67	Good	88.89	Very Good	66.67	Good	88.89	Very Good	66.67	Good	75.56	Very Good
9	Middle Class 4A	88.89	Very Good	66.67	Good	66.67	Good	77.78	Very Good	88.89	Very Good	77.78	Very Good
10	Middle Class 4B	88.89	Very Good	88.89	Very Good	77.78	Very Good	77.78	Very Good	66.67	Good	80.00	Very Good
11	Upper Class 5A	77.78	Very Good	88.89	Very Good	77.78	Very Good	77.78	Very Good	77.78	Very Good	80.00	Very Good
12	Upper Class 5B	88.89	Very Good	88.89	Very Good	66.67	Good	77.78	Very Good	88.89	Very Good	82.22	Very Good
13	Upper Class 5C	77.78	Very Good	66.67	Good	66.67	Good	88.89	Very Good	88.89	Very Good	77.78	Very Good
14	Upper Class 6A	77.78	Very Good	66.67	Good	66.67	Good	77.78	Very Good	88.89	Very Good	75.56	Very Good
15	Upper Class 6B	88.89	Very Good	88.89	Very Good	77.78	Very Good	77.78	Very Good	77.78	Very Good	82.22	Very Good
Mean		**79.26**	**Very Good**	**75.56**	**Very Good**	**68.89**	**Good**	**78.52**	**Very Good**	**76.30**	**Very Good**	**75.70**	**Very Good**

Data on the effectiveness of the use of the operational curriculum based on the theory of multiple intelligences is shown by comparing the value of the Criteria for the Completion

of Learning Outcomes set by the education and school offices with the average value of student learning outcomes classically. The completeness criteria for learning outcomes are the standard criteria set by the government, namely 75. In table 4 it can be seen that the average value of learning outcomes obtained by students is 82.70% greater than the standard criteria for learning outcomes set by the government. Thus it can be said that the use of multiple intelligences-based operational curriculum is effectively used to improve student learning outcomes.

Table 4. ClassicalStudent Learning Outcomes

No	Grade	Number of Student	Learning Outcomes Criteria	Student Learning Outcomes	Criteria
1	Under Class 1A	23	75	82.14	Complete
2	Under Class 1B	22	75	83.72	Complete
3	Under Class 1C	22	75	83.37	Complete
4	Under Class 2A	23	75	92.54	Complete
5	Under Class 2B	23	75	95.05	Complete
6	Under Class 2C	23	75	86.92	Complete
7	Middle Class 3A	28	75	82.36	Complete
8	Middle Class 3B	28	75	77.85	Complete
9	Middle Class 4A	28	75	76.92	Complete
10	Middle Class 4B	28	75	75.23	Complete
11	Upper Class 5A	24	75	83.41	Complete
12	Upper Class 5B	24	75	83.41	Complete
13	Upper Class 5C	23	75	80.61	Complete
14	Upper Class 6A	28	75	80.58	Complete
15	Upper Class 6B	27	75	76.35	Complete
Mean			**75**	**82.70**	**Complete**

Data on improvement of students 'scientific abilities is shown by comparing the results of the analysis of students' scientific self in table 5 and the results of analysis of students 'scientific activities in table 6. Students' self-definition referred to here is the initial scientific

ability possessed by students before using scientific learning obtained through questionnaire. The scientific activities of the students in question are student activities carried out by students during the scientific learning process obtained through observation.

In table 5, it can be seen that the average score of students' scientific self-assessment is 66.92% with good criteria. In other words, it can be said that students have good initial scientific abilities and this initial scientific ability can be developed in a more optimal direction. Knowing the students 'initial scientific abilities can help teachers design scientific learning to facilitate the development of students' initial scientific abilities. Thus, scientific learning becomes a very accurate learning that can facilitate the improvement of initial scientific abilities towards more optimal.

Table 5. Analyses Result ofStudent Self-Scientific Activities

No	Grade	Observing		Questioning		Experimenting		Associating		Communicating		Mean (%)	Criteria
		%	Criteria	%	Criteria	%	Criteria	%	Criteria	%	Criteria		
1	Under Class 1A	100.00	Very Good	36.36	Not Good	95.45	Very Good	45.45	Not Good	70.45	Good	69.55	Good
2	Under Class 1B	88.89	Very Good	44.44	Not Good	88.89	Very Good	58.33	Good	63.89	Good	68.89	Good
3	Under Class 1C	97.83	Very Good	71.74	Good	100.00	Very Good	91.30	Very Good	91.30	Very Good	90.43	Very Good
4	Under Class 2A	100.00	Very Good	29.17	Not Good	83.33	Very Good	52.08	Good	52.08	Good	63.33	Good
5	Under Class 2B	100.00	Very Good	47.73	Not Good	100.00	Very Good	59.09	Good	84.09	Very Good	78.18	Very Good
6	Under Class 2C	97.83	Very Good	43.48	Not Good	91.30	Very Good	71.74	Good	86.96	Very Good	78.26	Very Good
7	Middle Class 3A	98.72	Very Good	73.08	Good	89.74	Very Good	94.87	Very Good	84.62	Very Good	88.21	Very Good
8	Midd	83.3	Very	58.	Good	86.9	Very	88.	Very	57.1	Good	74.7	Good

	le Class 3B	3	Good	33		0	Good	10	Good	4		6	
9	Middle Class 4A	84.00	Very Good	65.33	Good	70.67	Good	50.67	Good	56.00	Good	65.33	Good
10	Middle Class 4B	75.00	Very Good	65.48	Good	70.24	Good	50.00	Good	23.81	Not Very Good	56.90	Good
11	Upper Class 5A	88.54	Very Good	70.83	Good	62.50	Good	32.29	Not Good	40.63	Not Good	58.96	Good
12	Upper Class 5B	89.13	Very Good	75.00	Very Good	69.57	Good	53.26	Good	46.74	Not Good	66.74	Good
13	Upper Class 5C	95.24	Very Good	65.48	Good	63.10	Good	38.10	Not Good	38.10	Not Good	60.00	Good
14	Upper Class 6A	59.00	Good	53.00	Good	35.00	Not Good	20.00	Not Very Good	36.00	Not Good	40.60	Not Good
15	Upper Class 6B	54.63	Good	48.15	Not Good	48.15	Not Good	38.89	Not Good	28.70	Not Good	43.70	Not Good
Mean		**87.48**	**Very Good**	**56.51**	**Good**	**76.99**	**Very Good**	**56.28**	**Good**	**57.37**	**Good**	**66.92**	**Good**

In table 6, it can be seen that the students' scientific activities that were seen during the scientific learning process were 76.27% with very good criteria. In this case, students can display their scientific abilities during the scientific learning process. Students' scientific abilities will emerge because they are facilitated by scientific learning. By comparing the results of the data obtained in table 5 and table 6 it can be said that the operational curriculum with the multiple intelligences theory approach can improve students' scientific abilities. This is seen because the average score of students 'scientific activities is 76.27% higher than the average score of students' scientific self-assessment, which is 66.92%.

Table 6. Analyses Result of Student Scientific Abilities

No	Grade	Observing		Questioning		Experimenting		Associating		Communicating		Mean (%)	Criteria
		%	Criteria	%	Criteria	%	Criteria	%	Criteria	%	Criteria		
1	Under Class 1A	76.00	Very Good	68.00	Good	60.00	Good	60.00	Good	80.00	Very Good	68.8	Good
2	Under Class 1B	80.00	Very Good	72.00	Good	64.00	Good	52.00	Good	92.00	Very Good	72	Good
3	Under Class 1C	92.00	Very Good	76.00	Very Good	60.00	Good	60.00	Good	88.00	Very Good	75.2	Very Good
4	Under Class 2A	76.00	Very Good	68.00	Good	56.00	Good	60.00	Good	84.00	Very Good	68.8	Good
5	Under Class 2B	84.00	Very Good	60.00	Good	68.00	Good	60.00	Good	88.00	Very Good	72	Good
6	Under Class 2C	80.00	Very Good	60.00	Good	68.00	Good	56.00	Good	88.00	Very Good	70.4	Good
7	Middle Class 3A	88.00	Very Good	76.00	Very Good	64.00	Good	68.00	Good	92.00	Very Good	77.6	Very Good
8	Middle Class 3B	92.00	Very Good	76.00	Very Good	64.00	Good	64.00	Good	92.00	Very Good	77.6	Very Good
9	Middle Class 4A	88.00	Very Good	80.00	Very Good	64.00	Good	56.00	Good	96.00	Very Good	76.8	Very Good
10	Middle Class 4B	92.00	Very Good	64.00	Good	76.00	Very Good	76.00	Very Good	88.00	Very Good	79.2	Very Good
11	Upper Class	76.00	Very Good	76.00	Very Good	88.00	Very Good	80.00	Very Good	76.00	Very Good	79.2	Very Good

	5A												
12	Upper Class 5B	80.00	Very Good	84.00	Very Good	76.00	Very Good	68.00	Good	80.00	Very Good	77.6	Very Good
13	Upper Class 5C	76.00	Very Good	80.00	Very Good	80.00	Very Good	84.00	Very Good	92.00	Very Good	82.4	Very Good
14	Upper Class 6A	80.00	Very Good	88.00	Very Good	80.00	Very Good	76.00	Very Good	96.00	Very Good	84	Very Good
15	Upper Class 6B	76.00	Very Good	80.00	Very Good	84.00	Very Good	80.00	Very Good	92.00	Very Good	82.4	Very Good
Mean		**82.40**	**Very Good**	**73.87**	**Good**	**70.13**	**Good**	**66.67**	**Good**	**88.27**	**Very Good**	**76.27**	**Very Good**

CONCLUSION

The operational curriculum is the entire actual activity of the learning process that occurs in the classroom that involves interaction, namely lesson plan as an instructional curriculum, teachers as decision makers and students whose needs must be met. The operational curriculum can also be said as a holistic classroom activities so that activities carried out in the classroom must lead to the achievement of learning objectives, must be filled with science and technology, must be carried out scientifically and must be measured and out of the ordinary.

The operational curriculum is the only curriculum that is directly in the position of implementation because the operational curriculum itself is an activity that occurs in the learning process that takes place in the classroom. Learning activities contained in a Learning Implementation Plan as a form of instructional curriculum, but when implemented in the classroom the learning activities are said to be an operational curriculum. The humanistic theory that forms the basis of the operational curriculum is the multiple intelligences theory pioneered by Howard Gardner. The enactment of the 2013 curriculum in Indonesia brings new changes to the learning process, one of which is learning using a scientific approach involving the ability of observing, questioning, exploring or experiment, associating, and communicating. Thus, the structure of the operational curriculum consists of 1) the introduction is a pawn determinant of learning activities carried out; 2) scope, namely the boundaries relating to the subject matter that will be taught and learned during the learning

process; 3) learning material which is a fraction of the subject matter that is flexible to the real situation and conditions when learning takes place; 4) the process of activities carried out during the learning process that are closely related to the use of theories, models, approaches, methods, strategies, techniques and learning tactics; 5) evaluation, conducted to find feedback on the learning process that has been carried out

This operational curriculum is binding on the relationship between students' scientific abilities which is very closely related to the use of scientific approaches in the learning process which is one of the learning approaches carried out by the 2013 curriculum as the Indonesian National curriculum and the multiple intelligences theory carried out by Howard Gardner. The results of the research conducted at Panca Setya 2 Elementary School Sintang, West Kalimantan for 20 teachers and 374 students showed that 1) the operational curriculum based on multiple intelligences theory was said to be very well used in the learning process, 2) operational curriculum based on Multiple Intelligences Theory effectively improved student learning outcomes, and 3) operational intelligence based on Multiple Intelligences Theory can improve students' scientific abilities.

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