

The Study on Adaptive Curriculum Modification of Inclusive Elementary and Junior High School in Banjarmasin, Indonesia

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Abstract

This paper aims to analyze the curriculum of inclusion education from the diverse aspects based on the diverse needs of learners. Those are studied from the terms of inclusion education curriculum policy and the concept of inclusive education and complemented by modification of inclusion education curriculum. Studying the diversity of learners 'needs further needs to be based on the characteristics of the learners' specific needs so that the objectives, contents, strategies, and evaluations of the curriculum that will be applied need to be modified based on the needs.

Keywords: modification and inclusion education

1. Introduction

The curriculum is an important element in the education system. Curriculum as a reference in implementing the education needs to be conceptualized carefully by paying attention to the achievement of educational goals, productivity, efficiency, and flexibility. The curriculum principle is important to do so that the curriculum is always in accordance with the needs of people with an interest in education. The principle of flexibility in curriculum development fits well with curriculum modification needs in inclusive education. It is because students of the inclusion program have a variety and the variants are very much, according to the special needs of each learner (Akdemir, Karamese, and Arslan, 2015: 3199). Therefore, the principle of curriculum flexibility is indispensable in curriculum development of education in inclusive schools.

Inclusion schools are those that have applied shared learning between children with special needs and their child's age in general for regular schools (Rachmawatia, Nu'man, Widiastara, and Wibisono, 2016: 585). This becomes a new model in educational concept. The government continues to strengthen the implementation of inclusive education and has included inclusion school into regulation. It can be seen in various regulations, such as Act No. 20 of 2003 on National Education System, National Minister Act No. 70 of 2009 on Inclusive Education, and Act No.14 of 2005 on Teachers and Lecturers, and Act No. 8 of 2016 concerning Persons with Disabilities.

The policy on inclusive schools is the further consequence of the Education for All global policy that was proclaimed by UNESCO in 1990. With inclusive education, it provides the widest opportunity for all learners who have physical, emotional, mental, and social abnormalities or have the potency of intelligence and / or special talents to obtain the qualified education in accordance with their needs and abilities. Thus, there is no discrimination against students who belong to children with special needs. Children in autistic, hyperactive, down syndrome or other needs can study together into regular classes in every level of education. In providing educational services, educational institution is forbidden to see the background of learners either in terms of academic or intellectual ability, physical weakness, mentality or emotion as the requirement of entering the school.

Meanwhile, the major problem that occurs in inclusive school management is in the curriculum aspect that does not reach the concept of fulfilling the variant needs of each learner in need of special assistance. For example, the curriculum for children with mentally disabled, children with learning disabilities, and slow learner, and other types of needs are those in no form of curriculum that can be applied in school.

The practical step the teachers can take is adapting the curriculum according to the needs of the learners; but this is not easy to do in inclusive school program because of the limited knowledge, education, training, and insight of educators. In inclusive learning of regular classes, the curriculum of learners with special needs are important to consider several principles, especially on graduate competency standards, core competencies, basic competencies, and indicators of successful learning.

Based on the problematic analysis of the inclusive education curriculum, the study on adaptive curriculum development in inclusive education for learners with special needs becomes interesting to conduct. It aims to find out and discuss the concept of inclusive education curriculum and to find the development concept of adaptive curriculum in inclusive school. This study was conducted in any schools using the inclusive education in Banjarmasin, South Kalimantan.

2. Review of Related Literature

2.1 Special Education Curriculum

In implementing the learning to achieve the quality of educational goals, the curriculum contributes significantly. The quality of education and curriculum are the integral parts of the system. When the quality of education needs to improve to achieve the certain goal, the quality of the curriculum as a tool in the learning process must be addressed. The effort to improve the curriculum is important because it is a set of arrangement plan of objective, content, materials, and ways that are used as guidelines for learning implementation in order to fit the goals to achieve (Soare, 2015). Similarly, special education curricula need to be designed according to the learning objectives in special education. The special education is the one for students who undergo physical, emotional, mental, social and intellectual impairment (Regulation of General Directorate of Primary and Secondary Education No. 10 / D / KR / 2017 on curriculum structure, core competence, and basic competence of curriculum 2013 in special education).

2.2 Concept of Inclusive Education Curriculum

The curriculum policy of inclusive education basically refers to the Curriculum 2013 Special Education which is regulated through the General Directorate of Primary and Higher Education No. 10 / D / KR / 2017. Thus, the norm already exists to support the implementation of inclusive education with various other laws and regulations. However, the implementation level of inclusive education has not been implemented optimally. The problem is related to the gap that exists between the normative basis and the implementation of inclusive education. The existing regulation does not set the implementation of inclusive education clearly.

In Indonesia, inclusive education is officially defined as an educational service system that includes children with special needs, to learn together with their children in regular schools closest to where they live. The implementation of inclusive education requires the school to make adjustments in terms of curriculum, educational facilities, infrastructure, as well as learning systems in line with the needs of individual learners (Directorate of Inclusive Education, 2004). In addition, in Article 1, the Act of the Minister of National Education of the Republic of Indonesia - No. 70 of 2009 on Inclusive Education for Students with Disabilities and Potentials of Intelligence and / or Special Talent states that what is meant by inclusive education is an education system that provides the opportunities for all learners who have abnormalities and have potency of intelligence and / or talent special to follow the education or learning in one educational environment together with learners in general.

The policy lays a foundation that inclusive education services in schools must be in line to the individual needs of learners with diverse abilities and potential (Valeeva, 2015; Kantavonga, Nethanomsak, and Luang-ungkool, 2012; and Maria, 2013). The definition of special education and special services are also described in Article 32 of Act No. 20 of 2003 on National Education System: (i) Special education is the education for learners who have difficulty in following the learning process because of physical, emotional, mental, social, and / or potency of special intelligence and talents; (ii) Special service education is the education for learners in remote or backward areas, isolated indigenous peoples, and /or natural disasters, social calamities, and economic inadequacies. Thus, both special education and special service education have the same students. This means that inclusive education has an essence that is the same as special education and special service education because both forms of education serve both children with special needs, both permanently and temporarily. Although both terms are treated separately, they are a regular form of education for children with special needs who are served inclusively.

Therefore, while inclusive education is defined as education for all and involves all children without exception by including children with special needs in a public class with other children, special needs children should be interpreted more broadly, not only those with physical impairments (visually impaired, deaf) and nonphysical (intellectual). They are also children with learning barriers due to geographic, socioeconomic and cultural factors, and children at risk of dropping out due to disaster victims, conflicts, and children at risk of dropping out due to the health of the vulnerable/diseased and infected bodies of HIV and AIDS.

Thus, the essence of inclusive education consists of two things: i) Inclusive education is the incorporation of regular education and special education into a unified school system for bringing together the different needs of all students; ii) Inclusive education is not merely an educational method or approach, but a form of philosophical implementation of the *rahman* and *rahim* that recognizes diversity among humans by carrying out a single mission to build a better life together. In relation to that one, the objectives of inclusive education as stated in the Act of National Education Minister of the Republic of Indonesia No.70 of 2009 are: (i) to provide the widest opportunity to all learners who have physical, emotional, mental, and socio-cultural barriers or have potential intelligence and/or a special talent for obtaining a quality education in accordance with their needs and abilities; (ii) to realize an education that respects diversity, and there is no discrimination for all participants. It is in accordance with the *Salamanca* statement and the education action framework of special needs in article 7 that the basic principle of inclusive schooling is that as long as possible all children should learn together regardless

of the difficulties or differences that exist in themselves. For this reason, curriculum that facilitates the special needs children can learn together in a regular school learning environment becomes necessary.

Hamalik (2005) states, the curriculum is an educational program provided to facilitate students in achieving learning objectives. Through this program, students perform various learning activities so that the changes and development of student behavior are in accordance with the purpose of education and teaching. This is supported by Act No. 20 of 2003 on the National Education System, article 1 paragraph (19) which reads: curriculum is a set of plans and arrangements concerning objectives, content, and lesson materials and ways used as guidelines for implementing the learning activities to achieve the certain educational goals. The same thing also appears in article 36 paragraph (3) which states that the curriculum is structured according to the level and type of education within the framework of the Unitary State of the Republic of Indonesia by considering the improvement of faith and piety, the improvement of noble character, the increasing of the potency, the intelligence and the interests of learners, diversity of regional and environmental potentials, regional and national development demands, demands of the working world, the development of science, technology, art, religion, dynamics of global development, national unity and national values.

Therefore, curriculum becomes the important part to determine the direction of education, especially inclusive education. On the other hand, the Indonesian government has facilitated inclusive education in the education system as a national education policy. It means that the availability of the inclusive education curriculum is very important in the learning process.

2.3 Curriculum Development of Adaptive Inclusive Education

Conceptually, the curriculum of inclusive education has become part of the government policy set forth in the National Education System Act; however, practically this does not have an adaptive curriculum in line with to the needs of learners. The development and adjustment need to be done more intensively so that the teachers can provide learning materials in accordance with the needs of diverse learners.

In inclusive learning, curriculum development can be done with some curriculum models for children with special needs in regular schools.

1. Duplicate Curriculum

The term duplication in the curriculum has the meaning of duplicating or copying the same curriculum as the original one. Duplicate curriculum is used for children with special needs with regular child curriculum in general. Duplicate curriculum is used for children with special needs of the blind, deaf, the orthopedically handicapped, and the simulative idiccy who intellectually have the same average ability with other children. Duplicating curriculum includes duplication of learning objectives along with its graduation standards, core competencies, and basic competencies. It also involves duplication of materials, processes, and evaluation of learning.

2. Curriculum Modification

Modifying curriculum can be interpreted by making adjustments or developing a curriculum for students with special needs. The general or standard curriculum applicable to regular students is adapted to the conditions, needs, and abilities of students with special educational needs. Modifications can be applied towards four main components, namely objectives, materials, processes, and evaluations. The curriculum modification can be conducted in two ways, namely downward modifications provided to the intellectually disabled. For the upward curriculum modification, it is done for gifted and talented learners. However, it is necessary to modify the learning process for students with visual impairment by using Braille letters; for the deaf, the sign language is used. For the intellectually disabled, it needs to be modified in accordance with the learning needs. In order to carry out the modification of the curriculum, the special teachers or tutors need to have specific teaching abilities according to the type of child in need.

3. Curriculum Substance

The curriculum substance is done by replacing some of that in the general curriculum with something else. The replacement is done because it is not possible to be done by students with special needs, but can still be replaced with other things in the same value with the replaced. The substantive model is related to learning objectives, materials, processes, and evaluations.

4. Curriculum Omission

The curriculum omission is part of the general curriculum for a particular subject totally excluded because the child with special needs makes it impossible to think equally with the average child. The curriculum omission means removing or eliminating the curriculum, either partially replacing or replacing the whole of the general curriculum. The curriculum omission is got through because students with special needs cannot follow the learning. Thus, there is material that cannot be delivered because it has a certain degree of difficulty so that there is no substitute instruction material. Therefore, the individual learning programs need to be developed, arranged on the children characteristics with special needs individually with the following steps:

- 1) Eliminating some standards of competence and basic competencies considered less important for the child's life;
- 2) Eliminating some standards of basic competencies;
- 3) Using the beginning and eliminating the end of both subject and sub subject;
- 4) Eliminating the beginning and using the final part of both subject and sub subject.

Therefore, the development of adaptive curriculum in general based on aspects of objectives, materials, processes, and evaluation can be divided into two groups, namely groups of children who do not have barriers towards intellectual intelligence and groups of children who have barriers towards intellectual intelligence in learning. While curriculum development that is referred to the aspects of objectives, materials, processes, and evaluation, the adaptation of the curriculum of the two groups of intellectual intelligence can be seen in the following table:

Table 1.

Adaptation of Special Needs Children's Curriculum with Special Needs Who Do Not Undergo Intelligence Barriers

Curriculum Adaptation	Objective			Instruction Material	Process		Evaluation		
	Core Competence	Basic Competence	Indicator		Method	Media	Question	Technique	Instrument
Duplicating	√	√	√	√					
Modification					√	√		√	√
Substitution				√					
Omission									

The table above shows that the blind, the deaf, and the ortopedically handicapped do not undergo intellectual obstacles and experience modification of objectives and learning materials; however, the one that needs to be modified is the method and the media in the learning process and evaluation of learning outcomes.

Table 2.

Adaptation of Special Needs Children's Curriculum with Special Needs Who Undergo Intelligence Barriers

Curriculum Adaptation	Objective			Instruction Material	Process		Evaluation		
	Core Competence	Basic Competence	Indicator		Method	Media	Question	Technique	Instrument
Duplicating									
Modification	√	√	√	√	√	√	√	√	√
Substitution				√					
Omission				√					

The table above shows that children with mental disability and other disabilities require modification of objective components, materials, processes, and evaluation of learning outcomes.

On that basis, inclusive education learning has a regular curriculum model, involving students with special needs to follow a regular curriculum like any other students in the same class. On the other hand, there is a regular curriculum model with modifications, ie teacher-modified curriculum on learning strategies, assessment types, and other additional programs referring to the needs of learners with special needs. In this model, there are students with special needs who have individual learning program prepared by teachers after being developed with the development team by involving classroom teachers, special education teachers, principals, and parents, as well as other professionals. By developing this adaptive curriculum concept, the teachers will have more chances to adapt the curriculum to the needs of learners in different needs. The teachers need to work based on the curriculum because in essence it is not the child who adapts and follows the curriculum, but the potency and the learning needs of the child are the ones that determine the learning curriculum.

3. Research Method

This research used descriptive method with qualitative approach (Tylor [ed], 2005). The population in this study is 88 teachers covering elementary and junior high school teachers, spread in 28 primary schools and 7 junior secondary schools. 88 teachers are then sampled by total sampling technique. The instruments used in this study are questionnaire and interview. The questionnaire was used to get data on the number of inclusive schools and the number of children with special needs, and the types of disabilities they have. The interview was used to find out the teachers' knowledge about the curriculum of inclusion education from the diverse aspects of the students' diverse needs, in terms of inclusion education curriculum policy as well as the inclusive education concept and teachers' ability to modify the inclusive education curriculum. The data analysis is conducted by describing the findings that occurred in the field in depth.

4. Research Finding and Discussion

4.1 The Number of Inclusive Education Schools in Banjarmasin

Banjarmasin as the research location is one of 13 regencies and or cities in South Kalimantan. Banjarmasin itself

is the capital city of South Kalimantan as a barometer of education center, industrial center, and government center. Banjarmasin is also named as the city of thousand rivers which has an area of 98.46 km². It is the delta region or an archipelago consisting of about 25 small islands, separated by rivers in between Tatas Island, Kelayan Island, Rantau Keliling Island, Insan Island, and others. Based on Central Bureau of Statistics in 2016, Banjarmasin has a population of 675 440 inhabitants with a density of 9381 people per km². The Banjarmasin metropolitan area includes Banjar Bakula with a population of about 1.9 million people. In a furtherly manner, Banjarmasin has 2,404 kindergartens and 104,999 students. The elementary school number is 2,901 with 381,950 students. Junior high school number is 588 and 121,265 students. From the number of schools and students, there are schools as organizer of inclusive education. South Kalimantan itself since 2012 has been declared by the Ministry of Education and Culture as one of the pioneer province that is organizing the inclusive education in Indonesia. Up to 2018, South Kalimantan has received 2 inclusive education awards by the Ministry of Education and Culture. In Banjarmasin, the number of schools organizing the inclusive education continues to increase in number from year to year. Here is the number of inclusive education school and the number of children with special needs in Banjarmasin.

Table 3.
 The Number of Inclusive Education School in Banjarmasin, 2018

No	School	Number of School	Number of Children with Special Needs
1	Elementary School	28	597
2	Junior High School	7	129
Total		35	726

Source: questionnaire analysis, 2018

From the 726 children with special needs, there are 560 children who experience intellectual obstacles or intelligence barriers as in table 4 below.

Table 4.
 The Disability Types of Children with Special Needs in Inclusive Elementary dan Junior High School Schools in Banjarmasin

No	Disability Type	Number	Note
1	Mental disability	98	Intelligence Barrier
2	Learning disability	10	
3	Slow learning	370	
4	Autism	82	
5	The blind	17	No Intelligence Barrier
6	The deaf	23	
7	The ortopedically handicapped	23	
8	The simulative idiccy	25	
9	Attention Deficit Hyperactivity Disorder (ADHD)	53	
10	<i>Gifted and Talented</i>	25	
Total		726	

Source: questionnaire analysis, 2018

Based on the above table, any schools organizing the inclusive education in elementary and junior high school level need the adaptation of whether the curriculum modification, substitution, and omission that need to be implemented by the teachers in Banjarmasin.

4.2 Teachers' Capacity

The inclusive education service for children with special needs because of intellectual barriers such as children with learning disabilities, learning disabilities, and slowness of learning in each inclusive organizing school requires the relatively enough quantity and quality of teachers. Based on the data collected, the number of teachers at the school of inclusive education in Banjarmasin is 88 people. Those are appointed by the Headmaster's Decree and get the incentive from the Mayor of Banjarmasin for Rp. 550,000 per month. The policy was active in 2017. By this policy, it shows that the local government of Banjarmasin has shown the good attention and commitment towards education service for children with special needs in schools of inclusive education organizers. Here are the details of teachers shown in table 5.

Table 5.
 Number of Teachers in Inclusive Schools

No	School	Number
1	Elementary School	70
2	Junior High School	18
Total		88

Source: questionnaire analysis, 2018

The other information by interviewing the teachers indicates that they do not understand how to develop the adaptive curriculum so that the educational service for children with special needs is the same curriculum as the children in general.

4.3 Development of Adaptive Curriculum

The inclusive education in regular schools provides opportunities for children with special needs to obtain the learning services in accordance with the potency diversity for those with intellectual capacity and with intellectual barriers. For children with intellectual impediments or cognitive impediments, this requires adaptation of the curriculum in modification, substitution, and omission. The curriculum development data in schools of inclusive education is obtained through 6 main questions. Those concern with curriculum modification or adaptation according to the needs of special need children at the level of passing standard, curriculum modification according to the needs of the children with special needs at the core competence and core competence, modification of minimum completeness criteria formula according to the needs of children with special need, modified syllabus based on the needs of children with special needs, the modified lesson plan in accordance with the needs of children with special needs, individual learning program for children with special need. Below is the research data grouped into 5 categories as in table 6.

Table 6.
 The Assessment Achievement Category of Modified Curriculum Development

Criteria	Achievement Level
Very less	0% - 20%
Less	21% - 40%
Fair	41% - 60%
Good	61% - 80%
Very good	81% - 100%

Based on the result of data collection, here is the achievement of adaptive curriculum development in elementary and junior high inclusive school in Banjarmasin:

Table 7.
 Inclusive School with Adaptive Curriculum

Criteria	Achievement Level of Curriculum Adaptation	Number of School
Very less	0% - 20%	32
Less	21% - 40%	3
Fair	41% - 60%	0
Good	61% - 80%	0
Excellent	81% - 100%	0
		35

Source: questionnaire analysis, 2018

The table above shows that there are 32 inclusive schools reaching 0% - 20% achievement level. It means that 32 inclusive schools do not develop the adaptive curriculum according to the learning needs of children with special needs in intellectual barriers. Only 3 schools reach the achievement of 21% - 40% conducting the adaptive curriculum development. There is no inclusive school of elementary and junior high school that develops the adaptive curriculum with fair, good, and excellent level of achievement. This shows that children with special needs who experience intellectual barriers have not received the educational service in accordance with the potencies and needs that must be developed. In addition, the educational service between children with intellectual barrier and children without intellectual barrier are served with the same curriculum. Thus, it illustrates that the inclusive school is still a segregated school or integration version. This is because the teachers have limited ability to identify and to assess as the basis for adaptive curriculum development. It is important to have this capacity. Through assessment, it can explore the students' potency to develop. The results of this assessment further form the basis of curriculum adaptation development with various variations, including preparation of individual curriculum programs known as individual learning program curriculum. In addition, teachers have not been able to develop the adaptive curriculum that suits the needs and potencies of children with special needs who experience intellectual barriers.

4.5 Commitment of Local Government

Based on the interview result with teachers, the role of local government does not work optimally and has not developed the teachers' capacity in elementary and junior high inclusive school. In general, the teachers' education background, special supervisor teachers are from general education that do not suit with the competence to be teachers for special need students. It is because the technical training for treating special needs children in inclusive school got by special supervisor teachers is very minus. They are in general inclusive concept and public policy.

5. Conclusion

The concept of inclusive education curriculum needs to be formulated conceptually by providing more chances for teachers to adapt the curriculum in learning towards children with special needs. This needs to be done so that they can provide instruction material in accordance with learners' needs with a variety of needs. The curriculum of inclusive education is directed to achieve the graduate competency standards that have been adapted to the variety of learners' needs.

The adaptive curriculum concept in inclusive education can be gotten by rearranging the material aspects in line with the learners' needs. On the other hand, the concept of an average student curriculum for students generally also needs to be based on the needs, abilities or potencies of the children with special needs. The downward adaptive curriculum is for the intellectually disabled learners and the upward curriculum modification is for gifted and talented learners. The modifications can also be done by omitting some parts of the average child's curriculum and replacing with more or less equivalent ones. This curriculum model is intended for children with special needs by considering the situation and condition. The adaptation of curriculum omissions also needs to be conducted on the part of the general curriculum for certain subjects to be able to eliminate totally. It is because this does not allow the children with special needs to be able to think equally as the average children do.

The implementation of inclusive education for children with special needs should be strengthened in order to realize education for all. The goal of inclusive education is to accept the difference because the true education is the right for all children of the nation. The value of tolerance and respect for differences will be strengthened when the concept of education leads to education service for all. This is hereinafter called character education, built through inclusive education service for all children and all schools.

6. References

- Act No. 20 of 2003 on National Education System.
- Act of the Minister of National Education of the Republic of Indonesia - No. 70 of 2009 on Inclusive Education for Students with Disabilities and Potentials of Intelligence and / or Special Talent.
- Act No.14 of 2005 on Teachers and Lecturers.
- Act No. 8 of 2016 concerning Persons with Disabilities.
- Elif Akdemir, Esmâ Nur Karameşe, and Ali Arslan. (2015). "Descriptive analysis of researches on curriculum development in education". *Procedia - Social and Behavioral Sciences*, (174), 3199 – 3203.
- Emanuel Soare. (2015). Perspectives on designing the competence based curriculum. *Procedia - Social and Behavioral Sciences*, (180), 972 – 97.
- George R. Tylor (ed). (2005). *Integrating Quantitative and Qualitative Methods in Research*. Second Edition. Maryland: University Press of America, Inc..
- Liliya A. Valeeva. (2015). "The Current State of Special Needs Education in Russia: Inclusive Policies and Practices". *Procedia - Social and Behavioral Sciences*, (191), 2312 – 2315.
- Mira Aliza Rachmawatia, Thobagus Muh. Nu'man, Nur Widiasmara, and Susilo Wibisono. (2016). "Differentiated instruction for special needs in inclusive schools: A preliminary study". *Procedia - Social and Behavioral Sciences*, (217), 585 – 593.
- National Minister Act No. 70 of 2009 on Inclusive Education.
- Oemar Hamalik. (2005). *Kurikulum dan Pembelajaran*. Jakarta: Bumi Aksara, Jakarta.
- Pennee Kantavonga, Teerachai Nethanomsak, and Nuchwan luang-ungkool. (2012). "Inclusive Education in Thailand after 1999 National Education Act: A review of a pre-service teacher education system". *Procedia - Social and Behavioral Sciences*, (69), 1043 – 1051.
- Peter Clough and Jenny Corbett. (2006). *Theories of Inclusive Education*. London: Paul Chapman Publishing.
- Regulation of General Directorate of Primary and Secondary Education No. 10 / D / KR / 2017 on curriculum structure, core competence, and basic competence of curriculum 2013 in special education.
- Savoji, Niusha, and Boreiri. (2013). "Relationship between epistemological beliefs, self-regulated learning strategies and academic achievement". *Procedia - Social and Behavioral Sciences*, (84), 1160 – 1165.
- Unianu Ecaterina Maria. (2013). Teachers' perception, knowledge and behaviour in inclusive education". *Procedia - Social and Behavioral Sciences*, (84), 1237 – 1241.