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Research paper

Inclusive Physical Education Implementation: Case Study in Yogyakarta, Indonesia

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Abstract

In recent years, inclusive education has become a very interesting issue in Indonesian education system. The implementation of this policy has never been evaluated. The study aims to explore an overview of the implementation of inclusive Physical Education (PE) in Yogyakarta, Indonesia. This research used survey with the employment of techniques of observation, interview, and giving questionnaire to 40 PE teachers in inclusive primary schools representing 5 regencies in Yogyakarta. Inclusive PE implementation was observed on the lesson plan documents and learning equipment preparation. All observations, interviews, and questionnaires were analyzed descriptively. The result shows that there is variability across the schools on the implementation of inclusive PE. In general, teachers still have difficulty in managing inclusion learning at primary schools because special infrastructure and facilities for disability are not available yet, and specific instructional models for inclusive schools are limited. Most teachers face difficulty in compiling learning variations to keep children excited, so that inclusive PE implementation in Yogyakarta has not been optimal. Based on the findings, possible recommendation for improvements in implementing inclusive physical education is developing learning model that can also build a character, including empathy, cooperativeness, togetherness, tolerances, and struggle for all students, including disable students.

Keywords: *disability; inclusive learning; inclusive physical education; primary school; students with special needs*

1. Introduction

Inclusive education in the recent years has become a very interesting issue in the national education system. The problems that often emerge in inclusive physical education implementation in Indonesia are those related to educational service for students with special needs at schools. This is caused by the fact that the inclusive schools which are recently operating were previously common schools designed to educate students who do not have any special needs or disabilities. Besides, generally, educators of non-inclusive schools have not had special abilities to participate in teaching at inclusive schools, while the provided curriculum and facilities were not prepared for giving educational service to students with special needs. Most of educators at schools are aware of the implementation of inclusion, but sometimes political policies practically do not get sufficient attention from the educational practitioners, so that the practical implementation is still confusing. Educators have implemented inclusive education, but in practice, students with special need are still equated with general students [1].

Data gained from the Department of Education, Youth, and Sport of Yogyakarta Special Region show that 103 (5.5%) out of 1,866 primary schools implement inclusive education. Those schools implementing inclusive education used to be common schools which were given special authorities to implement inclusive education, and also special facilities such as upgrading teachers' qualification and adding supportive infrastructure. Thus, disable students can be assisted by special teachers, adjusted to the students' disability, in any activity, including in physical education [2].

Survey on the implementation of inclusive primary school in Yogyakarta Municipality conducted by Sulistianingsih [3] concludes that there is only 14.2% of the inclusive primary schools that implement inclusive education which is appropriate with eight principles of inclusion. Further, Mauerberg-deCastro et al. [4] explain that generally, physical education teachers give positive response and behavior towards inclusive education, but they are still hesitate on the benefits of inclusion. On the other hand, effective teaching in inclusive setting is strongly related to the teacher's belief towards the benefit of inclusion.

In Indonesia, inclusive physical education has not been able to be thoroughly implemented. Some obstacles which impede the optimization of inclusive physical education program include the lack of educators who are specially trained, various educational backgrounds, and the limited number of supporting facilities for students with special needs. A good physical education is an integral part of education thoroughly, which aims at developing the aspects of physical fitness, movement skills, critical thinking ability, social skill, rational skill, emotional skill, and healthy life style through physical activities. In inclusive physical education, various modifications in learning process need to be conducted so that the established goals can be achieved.

The adaptive physical education learning model is preferably arranged adjusting to students' disabilities. In the stage of designing a model of inclusive physical education, research on how physical education teachers' perception on inclusive education and how it is implemented at primary school level is needed. Through giving opportunities to learning and skills practicing, students are ex-

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pected to master motor skills which encourage their fitness. When teachers give meaningful feedback, they learn to make changes on their skills and be able to achieve success. Students with disabilities get confidence when they play together in a team. Students who participate in inclusive physical education tend to also get involved in other school activities. By playing in a team, students will learn the meaning tolerance, diversification, and how to deal with it. In a team, they learn the skills of communicating, problem solving, and empathy.

So far, how serious inclusive physical education has been implemented has not been revealed. Based on this condition, further study on the implementation of inclusive physical education in primary schools in Yogyakarta Special Region is needed, since Yogyakarta Special Region is the barometer of education in Indonesia.

Based on these issues, the purpose of this study was to (1) analyze the lesson plans in accordance with curriculum objectives [5], (2) analyze the implementation of learning in accordance with the lesson plans that were drawn up [6,7], (3) analyze students' participation in inclusive learning [8,9], (4) analyze the inclusive learning environments and equipment [10], (5) analyze the physical activity tailored to the needs of inclusive class students, and (6) analyze teachers' ability to teach physical education at inclusion classes [11,12].

2. Literature Review

Inclusive physical education reflects an educational program which respects and accepts all students with all their conditions, and enables them to develop all of their potentials. The principle of inclusion is sharing with other people in a learning community [13]. Inclusive physical education gives advantages to all students, both those with special needs and those who are not. Students with special needs gain social skills when they are working and playing with their peers in common educational environment. They may also develop good and equal relation with their peers. All students can learn from the various behavior and diversity of their peers', both those with special needs and those who are not. Students with special needs can have more opportunities to participate in physical activities on their age group in an inclusive physical education environment. Inclusion in physical education honors all kinds of student diversity (not just disability) as an opportunity for learning about how everyone can become physically active through a variety of movement and fitness activities [14].

On the other hand, students with no special needs or disabilities can also take many advantages from the inclusive environment. When they learn with their peers in special needs, they tend to understand and develop more positive behavior towards their friends who have different conditions. Inclusion is a collaborative, student-focused process because students with disabilities can learn life skills and enjoy the opportunities to grow up with their peers in the dynamic environment that has a meaningful, high-quality, physical education [14].

It is revealed that students who do not have special needs tend to understand deficiency not as a weakness, but more as a different way in carrying out an activity. When teacher gives an opportunity for students to learn various things and ways, it is beneficial not only for students with special needs, but also to all students. Students who do not have any disabilities or special needs who are given an opportunity to become a tutor for their friends with special needs may have their mastery on the skills they are learning improved [15].

Physical education teachers are responsible for helping students attain their potential thoroughly and inclusive environment may help them to make it true. Optimizing the attitudes of respect, acceptation, and cooperation mean striving for the principal values developed by teachers in the class. Teachers are also responsible for creating learning environment which gives value to diversity and helping each student to focus on what they can do, and not to orientate to his/her limits and disabilities. Various diversities in terms of abilities, needs, interests, and learning styles are accommodated in inclusive physical education [16].

An inclusive physical education program is said to be successful if all students are thoroughly involved in the instructional activity, in equality environment, and they learn together. Although the activities in inclusive physical education are modified, students with special needs remain learning the same concept, skill, and matter so that education and access equality to all students can be achieved. Physical education requires common perceptions on the educators that the meaning of success to each student may be different. In inclusive physical education, peers are not only seen as a "helper", but also as a playmate. Students who do not have any disabilities or special needs can take a role as a leader and encourage students who need help, in an equal environment. Furthermore, in inclusive environment, all students can take the roles in turns, in becoming the mentor and the team's members, so that physical education instruction is preferably designed in the form of team model [13].

The access to physical education, physical activity, or sport programs is essential to students with special needs to grow and develop, especially in developing all their potentials to be ready to have independent life. Social experience, motor skills, fitness, confidence, healthy life style, and emotional development can be strengthened through participation in activities. Students with special needs often confront difficulties in gaining the same opportunities to participate in sport or physical activities in which their peers can enroll. This can restrict their ability to attain basic skills, knowledge, and experience which contribute to the formation of active and healthy life style. Inclusive physical education program, especially in primary educational level, is the initiation to form students' positive character. Teachers have to be able to ensure that each student is actively involved, enjoys every physical activity carried out, and gains the benefits, especially the psychological and physical fitness [13].

3. Methodology

This research employed survey with the techniques of observation, interview, and giving a questionnaire to 40 Physical Education Teachers representing 5 regencies in Yogyakarta Special Region. The sampling method used in this research was cluster random sampling. Out of 103 inclusive primary schools located in Yogyakarta Special Region, only 8 were chosen randomly representing each regency, so that there were 40 primary schools which were employed as the sample of the research. Meanwhile, the instruments used in this research were questionnaire and interview. A 'yes-no' questionnaire consists of 25 questions on the learning aim, methods, matters, equipment, and evaluation method. Inclusive Physical Education Implementation was observed from the documents of lesson plan and preparation of learning equipment as the learning preparation item. The learning process had been observed from the teacher activity in conveying the goals, material, methods, and target of learning by individually and team. Observation was also conducted on actuating the teaching learning process in term of method, duration, student involvement, especially on disable students. The correcting treatment for students who had not been able to do the task properly has also been the focus of this study. Learning outcomes were explored from the sense of pleasure, fitness, and the desire of students to repeat the learning. All observations, interviews, and questionnaires were analyzed descriptively to get an overview of the implementation of inclusive learning in the field of physical education.

4. Findings and Discussion

Before jumping to the findings of the research, description on the research subject needs to be elaborated. The total of 40 physical

education teachers from 40 primary schools comprises of 11 women (27.5%), and 29 men (72.5%). Their age is ranging from 26 years old to 40 years old, with the average of 33.4; and the Standard Deviation of 4.7. In addition, their experience in working as teacher is approximately nine years, and they have been dealing with inclusive physical education for approximately 3 years. From the 40 classes handled by the research subject, there are 63 students with disability, comprising of 54 students (85%) who are slow learners, and the rest are physically disable and deaf-mute students.

Most of the students' disabilities are slow learners, followed by intellectual impairment, low vision, hearing impairment, and physical disabilities. The result of the complete implementation of physical education (PE) inclusion implementation can be seen in Table 1.

Table 1: Results of Analysis of Implementation Plan of PE Inclusive Learning

Factor	Indicator	Poor	Good
Planning learning inclusive education	The learning objectives of PE	62 %	38%
	Physical activity material	93%	7 %
	Environment and Equipment	96%	4%
	Performance assessment	94%	6%
Average		86%	14%
Implementation of inclusive physical education lesson plan	According to plan	94%	6 %
	Participation of students in PE inclusion	67%	33%
Average		81%	19%
PE teacher in the learning ability of inclusion	Planning of physical education learning inclusion	80%	20%
	PE learning implementation inclusion	95%	5 %
Average		87%	23%

Table 1 shows that 100% of PE inclusive learning planning is in accordance with the curriculum. Then, 62% of PE inclusive learning planning were in accordance with learning objectives and 38% were less in line with PE learning objectives. In addition, 93% of the material PE lesson planning physical activity inclusion does not correspond to the learning objectives and 7% according to the learning objectives of PE. There are 96% of environmental planning and learning equipment not in accordance with the characteristics of PE students and 4% are according to the characteristics of the students. Besides, 94% planning learning outcomes of PE assessment less correspond to the learning objectives of PE inclusions and 6% accordingly. There are 90% of poor PE teachers in PE inclusive learning planning and the program is still equated with general PE learning, and 10% of PE teachers are sufficiently talented in PE inclusive learning planning.

One of the good practice aspects is employing the adapted curriculum to support student diversity [15]. Differentiating the curriculum to fulfill the individual needs and children's various behaviors has become a key aspect of inclusive education, yet this requires considerable teacher expertise, planning, and preparation [17]. In this research, the learning plan arranged by teachers has been in line with the goals of the curriculum, although it has not contained many modifications and adaptation to serve students with special needs according to their disabilities.

The result of the analysis of PE inclusive learning planning in Yogyakarta shows that 62% of PE teachers, in terms of their lesson planning, are less suitable with the learning objectives, because PE teachers, in preparing the learning goals, focus more on their sports skills. Meanwhile, the purpose or goal of PE inclusion is developing knowledge, skills and attitudes [18]. Similarly, physical material activity planning results show that 93% of PE teachers are less suitable to the learning objectives and less motivating students, because PE teachers do not understand how to modify physical activity as instructional teaching materials for inclusion. In addition, this study produced 96% of PE teachers in environmental planning, and the learning equipment for PE inclusion is less appropriate to student needs and less attractive to students. In addition, 94% of PE teachers in have not used a performance appraisal in the assessment and still use sport skill test, whereas the assessment of the sport skill test has not been able to measure the skills authentically.

The results of the implementation analysis of PE inclusive learning planning in Yogyakarta showed that 94% of PE teachers in implement the inclusive learning less appropriately to the learning planning, and there are only 6% of PE teachers who implement learning in accordance with the planning. Only 10% of deactivated students participate actively in PE inclusion studies, while 90% of the deactivated students are less active in following PE inclusion studies.

The result of teachers' ability analysis in compiling PE inclusive planning in Yogyakarta shows that 80% teachers are less capable to arrange inclusive learning planning and implement PE inclusive learning plan, and only 20% of PE teachers are able to plan PE inclusive learning. The number of PE teachers who are able to implement inclusive learning planning is only 5%, while 95% of PE teachers have not been able to implement inclusive learning.

Generally, inclusive physical education implementation in Yogyakarta has not been performed optimally, because 95% of the inclusive schools are common schools which are assigned to implement inclusive education according to the Law of Education. Some problems of inclusive physical education implementation at schools are mainly related to the availability of educational service for students with special needs, such as the lack of teacher training, facilities, and models of inclusive physical education learning. Seen from the teacher aspect, the physical education teachers' understanding to teach students with special needs is still low, including in preparing the appropriate learning model for students with special needs who have various conditions.

Disable students' involvement in inclusive physical education is still low, and the result of the observation shows that they make less movement than normal students (they averagely make only 60% of movements done by normal students). The observation conducted in the five schools also proves that teachers in inclusive schools still separate disable students from normal students in conducting physical activities in physical education learning process, so that the inclusive concept and principle have not been actually performed as it was expected.

Facilities and infrastructures in inclusive schools environment have not been totally appropriate for students with special needs (for example, special lane for wheelchair has not been provided, the restroom door is not wide enough for wheelchair access, and there are no handrails for disabled toilets). Further, learning facilities and infrastructures have not been designed according to disabled students' various needs, for example, the availability of audible ball for visually impaired students, colorful ball for low vision and intellectually impaired students, and body protector for motor impaired students. According to Bekele [16], the reasons for the low participation in the physical education practical class were due to the lack of comfortable sport fields/facilities and equipment, the high level of difficulty they have, the lack of willingness of their peers to do the physical activities with, the lack of support from the family, and the lack of interest from their physical education teachers to make them participate in practical classes.

The model of physical activity used by teachers in physical education learning has not been totally appropriate with the condition of inclusive class. The model of physical education activity implemented has not been modified to provide fair opportunities for students to make movements and the model has not facilitated the sprouting of cooperation, empathy, and

confidence so that the concept of "peer partner" has not been performed well.

The lack of training for teachers implicates on the insufficiency of quality learning. Teachers have less mastery in arranging physical activity models adjusted to the needs of the students who have different conditions. The teachers seem to be not ready yet to run the inclusive concept in physical education learning, since all teachers clearly state that the existence of students with special needs in the regular class is seen as an obstacle of the implementation of physical education learning. Teachers have not much explored the advantages of having disable students in class to optimize learning results to all students, both physically and mentally.

5. Conclusion

PE teachers have considered the curriculum in planning PE inclusive learning, but 93% of them plan less appropriate physical activity for that purpose. Meanwhile, 96% of PE teachers are less appropriate with students need and less attractive in terms of planning environments and learning PE inclusive tools. In addition, 95% of PE teachers use sport skill test assessments instead of performance appraisals.

The implementation of PE inclusive learning plan has not been run optimally yet by PE teachers, because 94% of PE teachers have lesson learned in accordance with their plan. Likewise, students' participation during PE learning process is 90% in less active category. PE teachers' ability in understanding the planning and implementing the PE inclusive education is still low, because 80% of PE teachers do not understand how to plan inclusive education and 90% of PE teachers do not understand how to implement the inclusive PE planning. Inclusive Physical Education Implementation in Yogyakarta Special Region, Indonesia, has not been optimally performed since from the teacher side, the availability of equipment and inclusive learning guides that were accessible easily by the teachers is still low. Then, based on the findings, possible recommendation for improvements in implementing inclusive physical education at elementary school in Yogyakarta and other region in Indonesia is to develop a learning model that can also build characters, including empathy, cooperative, togetherness, tolerances, and struggle, for all students, including students with disabilities.

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