

General Teachers' Attitude toward the Inclusion of Students with Visual Impairments (VI): A Study in DKI-Jakarta Indonesia

By

Esti Wungu and Abraham SeongHee Han

ABSTRACT

Two hundred and seven general teachers in Jakarta showed negative attitude toward the inclusion of students with visual impairments. There were no differences in levels of negative attitude among teachers in elementary, junior secondary and senior secondary school. This study also found eight factors that influenced successful inclusion in Jakarta.

Key words: attitude, inclusion, students with visual impairments.

1. Context of Study

Indonesia has a long history in special education, especially for students with visual impairments. The first school for children with visual impairments was established during the colonial time in 1920 followed by school for developmental disabilities in 1927. After Indonesia's independence in 1945, many schools for other impairments grew rapidly with support from the 1945 constitution, which stated that every citizen has the right to get education.

The process towards inclusive education in Indonesia was initiated in early 1960s by a couple of blind students in Bandung with the support from the organization of persons with visual impairment as a pressure group (Tarsidi, 2004). They insisted on pursuing higher level of education and tried to enter regular high school in spite of resistance from the part of the regular school. Their success has made many high schools and eventually universities be opened to blind students. At that time the development of the inclusive education was very slow, most of the students with disabilities who want to attend the regular school have to make an effort without any support from the government.

The Government of Indonesia began to pay attention to the importance of the integrated education in the late 1970s. They requested cooperation from Helen Keller International, inc. to developed integrated schools in Indonesia (Tarsidi, 2004). The program that was provided by Helen Keller International is rehabilitation and education for visual impairment students.

Along with the effort to establish inclusive education in Indonesia, the government had started to make some rules and ratified several world declarations about inclusive education. As a national rule are the constitution 1945 article 31, the Act on National Education System number 20 of 2003, the law

number 23 year 2003 concerning Children Protection, Bandung Declaration “Indonesia Towards Inclusive Education” in 2004 and Bukittinggi Declaration about Inclusion in 2005. In 1948 Indonesia ratified the Universal Declaration of Human Rights, followed by Convention on the Right of the child in 1989, World Declaration on Education for All (1990), UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993), Salamanca Statement and Framework for Action UNESCO (1994), Dakar Framework for Action (2000) and Declaration of the International Congress of Children (2004).

As a consequence of national movement in inclusive education many provincial governments commence to open inclusion schools in their own area. DKI (Special Capital Area) Jakarta as a capital city launched a rule about inclusive school for every level of education in 2003. The rule stated that every city in DKI Jakarta has to develop and build an inclusive school started in 2003-2004. The government of DKI Jakarta also instructed some schools to be a pilot inclusive school in each city. Currently, there are 25 pilot inclusion schools in 5 cities in DKI Jakarta consist of kindergarten, primary, junior secondary, high secondary and vocational secondary school. Instead of pilot inclusion schools pointed by the government, there are also 56 schools from primary to high secondary school that include students with disabilities (Mitra Netra Foundation, 2008).

Inclusive schools for student with visual impairment have had promoted for many years, in Indonesia it was started in 1970s by the Government of Indonesia and Heller Keller International. Inc. Chruickshank (1986, cited in Heward, 2006) stated that the blind child is perhaps the easiest exceptional child to integrate into a regular grade in the public schools. But according to Mitra Netra Foundation (2008) only 61 visual impairments students attend inclusion school in DKI Jakarta. The establishment of inclusive school in DKI Jakarta does not develop as expected. A noticeable shortage of infrastructural equipment, and lack of knowledge, skill and self-confidence on the part of teachers working in regular school, were consider to be two major factors that have undermine integration in many countries where educational policies favoring inclusion are implemented (Koutrouba, et al., 2006) and all those factors may also occur in Indonesia. Rigmalia (2005) in her study found that there are many challenges in implementation of inclusive education in Indonesia. Those challenges are culture, curriculum, attitude and competence of teacher, as well as the support system provision.

Bishop (1986) found from an extensive study of elements of successful inclusion of children with visual impairments in public school that the single most important factor was the regular classroom teacher’s flexibility. Teacher’s opinion about student with disabilities could have significant influence on student’s emotional, social and intellectual development. Good and Brophy (1997, cited in Campbell & Gilmore, 2003) stated that it has long been accepted that teachers’ attitudes and expectation impact upon their students’ educational outcome. In inclusion school regular teachers don’t

relinquish responsibility for students with special needs but work cooperatively with special education teacher, even in reality all regular teachers have to be a special education teacher due to situation and condition. In general, teachers have expressed positive feeling toward the general concept of inclusion, but have been less optimistic about the degree to which they are adequately prepared to successfully implemented inclusion (Scruggs & Mastropieri, 1996; Vaughn, et al, 1999).

For visual impairments students the condition could be worse. Center and Ward (1987) found that even though the majority of teachers agreed with policy of inclusion, they were only willing to accept the inclusion of students with mild physical disabilities. It seems that many teachers are not ready to teach student with visual impairments. According to Horne (1983), the general education teachers identify students with visual impairments as the students they would least want to have in their classroom. Koutrouba et al. (2006), found in Cyprus that teachers believed that student with severe mental retardation and visual impairment must be educated in special school, where individualized teaching could be provided. Students with visual impairments are viewed as a burden for their classroom teacher due to their lack of skill in teaching instruction for visual impairment students. Whiteman and Lukoff (1965, cited in Verplanken & Meijnders, 1994) noted that blindness is more negatively evaluated than are other physical disabilities, whereas attitudes toward blind persons do not differ from attitudes toward persons with other physical disabilities. This situation will lead to uncooperative climate in the class for both teacher and student with visual impairments. Hayes and Gunn (1988) stated that teachers who had negative experiences with children with visual impairments will have more negative attitudes toward the inclusion of such children.

Chow and Winzer (1992, cited in Alghazo & Gaad, 2004), argue that in order for inclusion to be successful, regular education teachers need to develop positive attitudes towards students with disabilities. Many educational programs have been found to fail because teacher attitudes. This is because particular perceptions and attitudes that people hold may have profound effects on adjustment and education of students with disabilities (Bartel & Guskin, 1971; Bowe 1978; Siller, 1976; Wright 1983, cited in Garvar & Schmelkin, 1989). Buell et al. (1999, cited in Campbell & Gilmore, 2003) reported a positive relationship between teachers' attitude toward inclusion and their belief that they could influence the educational outcomes of children with special needs. Teacher with positive attitudes have more self-confidence to support their students and adapt classroom materials and procedure to accommodate their needs.

In 2001, Mushoriwa investigated primary school teachers' attitude toward the inclusion of visual impairment students in Harare, Zimbabwe. He found that many teachers felt that it would be better if visual impairment students study at special school rather than at regular school. One of the reasons

from the teacher was that they had very heavy workloads in the class due to class size. Zimbabwe faced many problems to establish the inclusive education and one of the problems is teacher attitude.

According to National Education Minister, Bambang Sudibyo (2008), inclusive education is certainly highly relevant to current Indonesia conditions where the differences in religion, faith, gender, ethnicity and ability are often seen as a threat rather than a source of richness and diversity. However, in fact, as a developing country, Indonesia also has similar problems with Zimbabwe to commence inclusive education. These problems could hamper the movement of inclusive education and the national aim in education. Therefore, if Indonesia is aiming to change the education system and apply the inclusion school, the attitudes are important factor to investigate.

2. Purpose of the Study

Past research on attitude toward inclusion and visual impairments serves as a foundation for this study. As a developing country Indonesia is facing many problems in education system. Though the inclusive education started since more than 30 years ago, the movement is not as fast as expected. Many factors play a role in this situations, one of the important factors is teacher. They have a very important role to ensuring that adequate learning environment is established for students with disabilities as well as for students with visual impairments in inclusion school program. To have better understandings about this population, a study of teacher's attitudes toward the inclusion of students with visual impairment will be conducted. Also, this study is replicated Mushoriwa's study that investigated primary school teachers' attitude toward the inclusion of blind children in regular classes in Harare, Zimbabwe, with the differences in instruments and group of participants. Results will be useful to provide a practical database for improving the quality of inclusion school in DKI Jakarta especially for students with visual impairments.

3. Research Questions

This study is designed to obtain an understanding about teachers' attitude toward the inclusion of students with visual impairments in regular classes in DKI Jakarta, Indonesia. The following research questions serve as a guide for this study:

- 1) What are the attitudes of elementary and secondary general teachers toward the inclusion of students with visual impairments in regular classrooms in DKI-Jakarta?
- 2) How do attitudes differ among regular teachers in elementary, junior secondary and senior secondary schools in DKI-Jakarta?
- 3) What factors influence successful inclusion of students with visual impairments in regular classes according to elementary and secondary regular teachers in DKI-Jakarta?

4. Literature Reviews

4.1 Inclusion in Indonesia

Indonesia is a large country both in terms of population and geographically and it is highly differentiated as to culture, religion and social groups. According to Smith and Horton (2007), education system in Indonesia is reasonably developed with high enrollment figures for primary school. However, marginalized group (disabled persons, ethnic groups, etc.) largely fall outside the school system. Over the last decade, Indonesia has gone through a period of great political and social change, and has lately experienced severe environmental calamities (tsunami, earthquake). This situation has an impact to education development system since many resources are used to manage those crises.

Inclusion of students with disabilities started in 1986 when Ministry of National Education launched the Pilot implementation on inclusive education (Mujito, 2005). The purpose of inclusive schools is to promote an inclusive society irrespective of social status, race, faith and ability, with differences being respected and valued (Directorate of Special Education, Ministry of National Education, 2008). Thus, inclusive education in Indonesia is not only for students with disabilities but also for every child who has no opportunity to get education due to their parents/family or environment condition.

Inclusion in Indonesia received more attention when the Department of Education and Culture launched a rule No. 31/101:B2/LL/1999 on the Designation of public junior and senior high schools in Jakarta as schools carrying out an integrated educational system. The term inclusion is generally used to describe the practice of educating students with disabilities in the same learning environment with students who have no disabilities under the direction and instruction of the regular education teacher while receiving necessary support from the special education teacher. However, not every school has opportunity to provide special education teacher for disabilities students due to the financing problem. Thus, sometimes students have to find special education teacher on their own effort or they receive support from private organization that provide services to help disabilities student to attend regular classes.

According to Directorate of Special Education, Directorate General of Primary and Secondary Education, Ministry of National Education (2005), there are three pilot models of inclusive education in Indonesia:

Model 1: children who experience slow learning and learning difficulties learn together in regular classrooms, as was the case of first stage of the pilot implemented in Elementary School Karang Mojo, Wonosari, Province of Yogyakarta.

Model 2: in this model, some students who have been learning in special schools for some time and have earned preparation are placed in regular schools, with the help of special education assistant.

Model 3: this model includes formal invitation by regular schools to receive students with special needs in the enrollment.

Implementation of inclusive education is followed with some efforts to promote inclusive education. Indonesia holds several events to socialize and achieve inclusive education in national and international level. First event is held in Bandung, 8-14 August 2004, resulted declaration Indonesia toward Inclusive Education. The declaration consists of seven statements:

- 1) Ensure that every child with disabilities and other children with special needs receive equal access in all aspects of life - in education, health, social, well being, security and other aspects so that they will become trustworthy succeeding generation
- 2) Ensure that every child with disabilities and other children with special needs grow as dignified individual to receive good humane treatment, quality education which develops their potentials and meets the demands of the society without discriminative treatment that would harm their life physically, psychologically, economically, sociologically, legally, politically as well as culturally.
- 3) Implementation and development of inclusive education is supported by good synergic and productive cooperation among stakeholders in particular the government, educational institutions, related institutions, business world and industry, and parents as well as society.
- 4) Create supportive environment, to meet the needs of children with disabilities and other children with special needs which makes it possible for them to develop their optimum unique potentials.
- 5) Ensure the freedom of children with disabilities and other children with special needs to reactively and proactively interact with anyone, in any place, and any environment by minimizing the barriers.
- 6) Continuously promote and socialize inclusive education through mass media, scientific forum, education, etc.
- 7) Design Plan of Action and allocate the needed funds to promote physical as well as nonphysical accessibility, quality education service, health, recreation, well being of all children with disabilities and other children with special needs.

The second event is an International Symposium on Inclusion and the Removal Barriers to Learning in Bukittinggi, 26-29 September 2005, attended by 500 participants from thirty countries. Bukittinggi symposium resulted several recommendation as follows:

- 1) Inclusion should be seen as a fundamental principle that provides the basis of all national policies.
- 2) The concept of quality should focus on the social, emotional and physical development, as well as the academic achievements of children.
- 3) National assessment and evaluation systems need to be revised in relation to the principle of non-discrimination and inclusion and the concept of quality mentioned above.

- 4) Adults should respect and value all children, irrespective of their individual characteristics and circumstances, and take their views into account.
- 5) All ministries should work together to develop common strategies towards inclusion.
- 6) To ensure Education for All through the child friendly school (CFS) framework, the issue of non-discrimination and inclusion must be addressed in all dimensions of CFS, with coordinated and shared efforts between government and non-government organizations, donors, communities, local groups, parents, children and the private sector.
- 7) All governments, and international and non-governmental organizations, should collaborate and co-ordinate their efforts to achieve sustainable development of inclusive communities and learning-friendly environments for all children.
- 8) Governments should consider the social and economic implications of not educating all children, and should therefore include all school age children in their Education Management Information Systems (EMIS).
- 9) Pre- and in-service teacher education programs should be revised in order to support the development of inclusive practices from early pre-school age and up with emphasis on a holistic understanding of child development and learning including early intervention.
- 10) Governments (central, provincial and district) and schools should establish and sustain a dialogue with communities, including parents, about the value of a non-discriminatory and inclusive education system.

According to IDP Norway, the implication of these recommendation is that the principles of inclusion must be the basis all strategies for raising standard within (formal and non-formal) education systems, developing friendly school, and therefore, achieving Education for All (<http://www.idp-europe.org>, 2005).

Following those actions, in 2007, Ministry of National Education with IDP-Norway launched the tool kit for the implementation of Inclusive Education. Up to the year of 2007, there had been 796 inclusive schools in seven provinces (West Java, West Sumatra, DKI Jakarta, Central Java, East Java, West Nusa Tenggara and South Sulawesi) consisting of 17 inclusive Kindergartens, 648 primary schools, 75 Junior Secondary Schools and 56 Senior Secondary Schools. All these schools enroll 15,181 students with special needs.

A model for inclusive school or class in Indonesia according to Ministry of National Education is described below:

Inclusive school/classroom established by regular schools that educate students with disabilities or special schools that educate regular students with flexibilities of instructors(for special skills), teachers, learning process (tailored to the students' needs), learning's goal, and school also should

provide students with disabilities with additional skills (such as Orientation & Mobility in Students with visual impairments). Every inclusive school should received assistances from university, particularly from department of education/special education, psychology or other departments related to teaching curriculum. Furthermore, schools are expected to have cooperation with institutions or foundations that can provide benefits for students with disabilities, also with other regular and special schools (see the Figure 1. below).

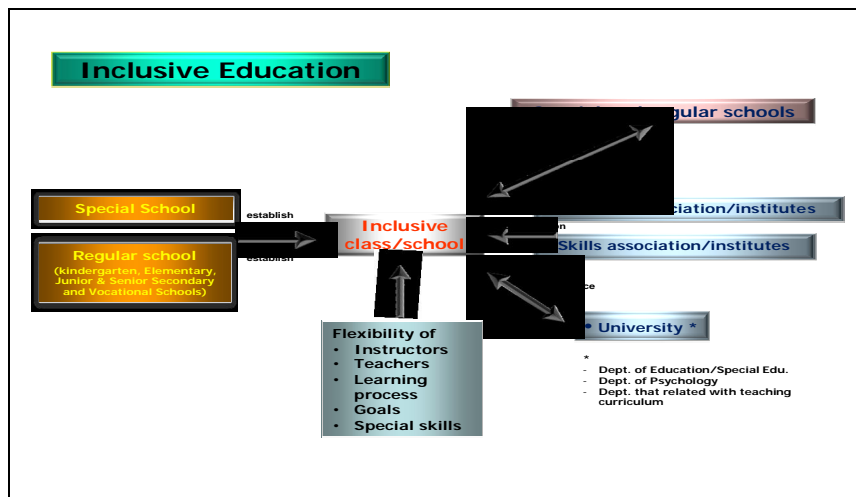


Figure 1. Inclusive education model in Indonesia (Source: Directorate of Special Education, Ministry of National Education, 2008)

In fact, the condition of inclusive school in Indonesia is still far from the ideal model. The school that implemented inclusive education includes students with disabilities in a regular class during school hours, sometime lack of appropriate materials and infrastructures for the students with disabilities. Some school has a resource room for disabled students to learn special subject or skill, but many schools do not provide it, thus in this case student with disabilities has to find other ways to attain additional skills.

According to country report in 2004, the effort to provide handicapped people with adapted material in Indonesia setting have so far made partially, and still lack serious attention and consequently the quality of adapted material is generally low.

Inclusive education in DKI-Jakarta has been recognized as a major concern by provincial government. Thus, the local government followed the national rule of inclusive education with some actions. In the year of 2003, Government of DKI-Jakarta imposed laws No. 103/2003 and No. 34/ 2003

to support the implementation of inclusive education and pointed several schools to be a pilot inclusive school. There are twenty-five schools under the DKI-Government law.

In the implementation of inclusive education, every municipality has one resource center where schools and teachers can ask questions about various issues related with the needs of student with disabilities. Every resource center consists of education experts, government officials and special education teachers. In big city, such as DKI-Jakarta, many NGOs (Non-Governmental Organization) also support the implementation of inclusive education such as Helen Keller International, IDP-Norway, Save the Children, etc. Through cooperation among DKI-Jakarta government and NGOs, there is an increasing number of inclusive schools in DKI-Jakarta by 69% (33 schools to 56 schools).

4.2 Inclusion of Students with Visual Impairments in DKI-Jakarta

Inclusion of student with visual impairments in DKI-Jakarta started in 1980s when the local government worked together with Helen Keller International (HKI) to promote education for Blind and Visual Impaired students. There is an estimate of thirty thousand children of school age are blind or visually impaired living in Jakarta, and less 2% of these students regularly attend school (HKI, 2008). Children with blindness and visual impairments learn differently, for no other reason than the fact that, in most cases, they cannot rely on their vision to provide information. The information they obtain through their other senses are often fragmented, inconsistent (objects are not always safe to touch, do not always make noise or always produce an odor) and passive (are not under the student's control). Consequently, special facilities have to be built in school. Due to this condition, many schools relinquished their responsibility to educate visual impairment student in their school.

From the beginning, the Government of DKI-Jakarta focused on students with visual impairment to develop foundations for inclusive education system. Inclusion of students with visual impairments in DKI Jakarta used the second model of inclusive education in Indonesia. Thus, students with visual impairments from special schools continue their education in regular schools. Yet, there are some regular schools do not have suitable materials and infrastructure for students with visual impairment. Despite that fact, those schools still accept students with visual impairments to study with the support from national or international NGOs, especially for human resource support (such as itinerant teachers).

DKI Jakarta has five resources center which are located in municipality level, but in fact only one resource center that work effectively, which is, resource center in South Jakarta municipality that placed in SLB-A (Special School for the Visually Impaired) Pembina Tingkat Nasional (The National Level of the Exemplary School). The recourse center provides itinerant teachers for students with visual impairments, also they help general teacher to handle students with visual impairments. Furthermore, the resource center provides material for teaching, particularly Braille books or printings.

Another problem in inclusion for students with visual impairment in Jakarta is the low participation of teachers and parents (Mangunsong, 2006). One study concluded that three aspects should be improved to promote inclusive education for students with visual impairments, which are: teachers' training in inclusive education especially for students with visual impairments, some facilities should be provided for students and teachers' needs and more socialization in order to promote inclusive education.

To accelerate the implementation of inclusive education in DKI Jakarta, the provincial government formed Basic Education Services of DKI (BES DKI) Jakarta in 2005. The main purpose of BES DKI is developing teaching system and curriculum for teachers and infrastructures for students with special needs who study at regular schools. Some efforts has been made by BES DKI such as teachers' training, build collaboration among regular schools and special school and make a curriculum appropriate with inclusive education.

In 2006, The Indonesian Union of the Blind (PERTUNI) and the International Council for Education of People with Visual Impairment (ICEVI) launched a project in Jakarta and Bandung to provide support for students with visual impairments enrolled in the higher education in these two cities. In Jakarta the project was coordinated by Mitra Netra, a local NGO that established centers for support service in three different location throughout Jakarta to facilitate and provide support to student with visual impairments. Another project by International Development Partners (IDP)-Norway in 2005-2007 tried to strengthened schools facilities for students with visual impairments. The IDP-Norway also provided Braille book production for students with visual impairments not only in DKI Jakarta, but also all over Indonesia.

5. Methodology

5.1. Participants

Participants in this study are elementary and secondary general teachers who work as a classroom or subject teacher in pilot inclusion school that includes students with visual impairments in DKI Jakarta, thus every teacher whether he/she has a student with visual impairments or not will be included in this study. A purposive sampling technique used in this study due to limitation of pilot inclusion school in DKI-Jakarta. The instruments distributed in five municipalities in DKI-Jakarta. Data were distributed to 250 participants, and 211 data were returned. Four data were eliminated due to the incomplete information. Data recapitulation as following:

Table 1. Recapitulation of Participants

NO	School	Municipality	Participants
Elementary Schools			
1	SD Lebak Bulus 02	South Jakarta	14
2	SD Ulaka	South Jakarta	14
3	SD Benhil 03	Central Jakarta	12
4	SD Kebon Pala	East Jakarta	14
5	SD 09	West Jakarta	9
6	SD 04 Kelapa Gading	North Jakarta	12
Junior Secondary Schools			
7	SMP 226	South Jakarta	20
8	SMP 269	West Jakarta	16
9	SMP 223	Central Jakarta	15
10	SMP 191	West Jakarta	14
Senior Secondary Schools			
11	SMU 66	South Jakarta	14
12	SMU 5	Central Jakarta	16
13	SMU 54	East Jakarta	114
14	SMU 112	West Jakarta	14
15	SMU 33	North Jakarta	9
TOTAL			207

1) General Information of Participants

Data were collected from five municipalities in DKI-Jakarta, which are South Jakarta (30%), East Jakarta (20.8%), North Jakarta (10.1%), Central Jakarta (21.3%) and West Jakarta (17.9%). The participants (N=207) were dominated by female participants who were almost twice as many as the male participants. More than sixty percent of the participants are subject teacher, while the classroom teachers are 35.7%. Most of the classroom teacher is in the elementary school. More than seventy percent has bachelor degree, but still there are teachers were (only) graduated from teacher school or equal with senior secondary school (2.4%). The age of the participants were dominated by age 41 to 50 years old. The most ethnic background is Javanese (people from Yogyakarta, Central and East Java province).

The duration of teaching experience is quite evenly distributed from less than one year to 40 years. More than sixty percent teacher had experience in inclusive education, but only 38.6% had experience in inclusion of students with visual impairment. Unfortunately, only twenty percent of teacher had training in inclusion education. Currently only 19.8% of the teachers are having students with visual impairments in their class. Most of the teachers have more than 30 students in one class, while the ideal class size were only experienced by 2.4% of the teachers. The welfare condition of the teachers are already good. More than 70% of the teachers have got a revenue of more than 200 US\$, while GNP of Indonesia is 187 US\$ per month. The summary of the demographic information is as follows:

Table 2. Demographic Information

Characteristics	Category	<i>N</i>	%
Teaching Level	Elementary	75	36.2
	Junior Secondary	65	31.4
	Senior Secondary	67	32.4
Teaching Status	Classroom Teacher	74	35.7
	Subject Teacher	130	62.8
	Unidentified	3	1.4
Gender	Female	127	61.4
	Male	80	38.6
Age	21-30 yrs old	19	9.2
	31-40 yrs old	37	17.9
	41-50 yrs old	97	46.9
	51-60 yrs old	52	25.1
	61-65 yrs old	1	0.5
	Unidentified	1	0.5
Ethnic Background	Javanese	94	45.4
	Bataknese	28	13.5
	Minang	18	8.7
	Batak	15	7.2
	Betawi	22	10.6
	Bali	2	1.0
	Sulawesi	5	2.4
	Mix Ethnic	18	8.7
	Other	4	1.9
	Unidentified	1	0.5
Education Background	Teacher School	5	2.4
	College	34	16.4
	Bachelor	152	73.4
	Master	8	3.9
	Other	8	3.9
Teaching Experience	0-5 years	24	11.6
	6-10 years	19	9.2
	11-15 years	32	15.5
	16-20 years	34	16.4
	21-25 years	46	22.2
	26-30 years	32	15.5
	31-35 years	12	5.8
	36-40 years	3	1.4
	Unidentified	5	2.4
Experience in Inclusion	Never	63	30.4
	1-5 years	91	44.0
	6-10 years	39	18.8
	11-15 years	6	2.9
	16-20 years	4	1.9
	26-30 years	3	1.4
31-35 years	1	0.5	
Training in Inclusion	Yes	42	20.3
	No	165	79.7
Class Size	10-20 students	5	2.4
	21-30 students	13	6.3
	31-40 students	158	76.3
	41-50 students	30	14.5
	51-60 students	1	0.5
Experience with Students with VI	Yes	80	38.6
	No	125	60.4
	Unidentified	2	1.0

Table 2. (*Continued*)

Currently Having Students with VI	Yes	41	19.8
	No	163	78.7
	Unidentified	3	1.4
Teachers' Revenue	< 100US\$	21	10.1
	101-200 US\$	24	11.6
	201-300 US\$	43	20.8
	301-400 US\$	52	25.1
	401-500 US\$	54	26.1
	> 500 US\$	10	4.8
	Unidentified	3	1.5
Teachers' Expense	< 100US\$	13	6.2
	101-200 US\$	39	18.5
	201-300 US\$	52	25.1
	301-400 US\$	52	25.1
	401-500 US\$	34	16.6
	> 500 US\$	17	8.1

5.1.2. Instruments

1) Battery of Instruments

Questionnaire were suitable for this research, due to their anonymity since inclusion school is still a new policy issue; teachers need to feel free to give their real opinion about inclusion without fear of victimization. There are four questionnaires in this study as follows:

(1) Demographic Questionnaire.

Demographic information was collected from the participants which consist of teacher's status, age, gender, ethnic background, educational attainment, socioeconomic status, number of year of teaching experience either in regular class or in inclusive class, courses taken in inclusive/special education, grade level taught, class size, and has visual impairments students or not. According to Horne (1985), some factors such as teacher's status, age, gender, ethnic background, educational attainment, socioeconomic status might be related to the teacher's attitude toward students with disabilities. Class-size could have effects with teacher's attitude, especially in developing countries when there are more than 40 students in one classroom (Mushoriwa, 2001).

(2) Attitudes toward the inclusion of visual impairments students Questionnaire.

A questionnaire, which was developed by Mushoriwa (2001) who adopted it from Mel & Ainscow (1998), was used in this study. The questionnaire applied the Likert scale that ranged from one to five to explore responses to statements ranging from strongly agree to strongly disagree. The questionnaire has 14 items, which divided into 3 aspects: social, academic and teacher's competence/willingness to teach blind children. The first ten items examined teachers' attitudes toward including blind children in regular classes while the last four items related to the teachers' views about the regular teachers' understanding of and competence in handling blind children. The questionnaire was used in two countries Zimbabwe and Australia.

(4) Open question about successful inclusion factors

In the fourth questionnaire teachers asked to write factors that influence successful inclusion of students with visual impairments in regular classrooms in DKI-Jakarta.

2) Instruments Procedures

(1) Translation

Two of the questionnaires are originally written in English, but it translated into Indonesian language. To ensure that Indonesian version represents the English version, this study used the “back translation technique” (Brislin, 1970 cited in Dixon, 2004). Three steps are used in the back translation: First, researcher translated the English version questionnaires into Indonesian version. Second, the second person has expertise in educational psychology and also work as an English teacher translated Indonesia version into English version. Third, the third person who has expertise in developmental and cognitive psychology, also fluent in English, reviewed both English and Indonesian version. Based on the feedbacks from second and third person, researcher corrected all the questionnaires and made a final version of the instruments.

(2) Scoring

Scoring procedures for Attitudes toward the inclusion of visual impairments students Questionnaire by Mushirowa (2001) is as follows: a maximum score for this questionnaire is 70 (14×5) and a minimum score is 14 (14×1). The total score is divided into two groups, positive (total score 14 to 34), and negative (total score 36 to 70). The total score of 35 is regarded as undecided attitude.

3) Reliability and Validity

The pilot study was not done as originally planned due to the time limitation. However, both of the questionnaires are standardized questionnaires, thus, a reliability and validity test conducted to check its reliability and validity in Indonesia Language. Internal consistency procedure was used to test the reliability. The SPSS 15.0 program was used to calculate the reliability and validity coefficient.

Reliability is the consistency of a set of instrument test, while validity is the extent to which measures what it is intended to measure (Mertens, 1998). Two instruments in this study are intended to measure teachers’ attitude toward inclusion of student with disabilities. The reliability for Attitudes toward the inclusion of visual impairments students Questionnaire is 0.755, which means that instrument is reliable. The recapitulation of reliability and validity for each factor is as follows:

Table 3. The Reliability and Validity Attitudes toward the Inclusion of Visual Impairments Students Questionnaire

No	Factor	Cronbach's α	Correlation coefficient
1	Social Aspect	0.66	0.89**
2	Academic Aspect	0.37	0.78**
3	Teachers' competence/ willingness	0.52	0.79**

** correlation is significant (p) at the 0.01 level (two tailed)

The table showed that reliability for each factor is not as good as the reliability for the instrument. The validity for each item in both instrument showed that every item is valid and can be used to measure teachers' attitude toward the inclusive education with $p=0.01$ (two tailed).

5.1.3. Design

This study used a survey-research design. Mertens (1998) noted that surveys can be conducted for a wide variety of purposes. One of them is describing the characteristics of a sample at one point in time. The intention of this study is to assess teachers' attitudes toward the inclusion of students with visual impairments in a certain time in DKI Jakarta-Indonesia.

5.1.4. Data Collection

1) Procedures and time-line

- (1) Started in December 2008, researcher contacted school/principal to ask permission to collect data in her/his school. The cover letter included proposal in Indonesian language and notification letter from Kongju National University about the researcher and purpose of the study.
- (2) The principal determined teachers who will participate in this study in January 2009, due to the limitation of teacher and unbalance number between female and male teacher thus not every school present the same number of respondents in each gender. This process took almost one month due to the school activities.
- (3) In February 2009, researcher and data collectors dropped the questionnaires for the teacher through a contact person who instructed by the principal to help the data collection process. Duration for this phase was different for each school, some schools only took one week, but other schools took almost two months, as a result of the teachers and school activities. Some

schools were not cooperative, thus the data collectors had changed those schools with other pilot schools.

- (4) After the participants filled out the questionnaires, data collectors collected questionnaires and placed the questionnaires in an envelope. Then, data collector checked and coded all the answers, especially for the last question.
- (5) Further inquiry was conducted if respondents wrote unclear answer particularly in the last question of the questionnaire, "What factors influence successful inclusion of students with visual impairments in regular classes according to you?" Unfortunately, not all-unclear answers were inquired to the teachers due to the time limitation and teachers activities.
- (6) At the end of the study, the data collectors gave a small gift for each respondent and the principal as a reward for his or her participation in this study.

2) Setting of the study

This study took place in DKI Jakarta, Indonesia. Jakarta is a province with special status as the capital of Indonesia. Jakarta, as a province, is divided into five cities (*kota*), formerly municipalities, each headed by a mayor, and one regency (*kabupaten*) headed by a regent. The cities are Central Jakarta (Jakarta Pusat), South Jakarta (Jakarta Selatan), North Jakarta (Jakarta Utara), West Jakarta (Jakarta Barat) and East Jakarta (Jakarta Timur). The only regency in Jakarta which is Thousand Islands (formerly a subdistrict of North Jakarta) is not included in this study due to location and distance. The Thousand Islands is located in the Jakarta bay, where the 105 islands are located 45 kilometers (28 miles) on the north of the city.

The population of DKI Jakarta is 8.8 million. Currently, there are 824,695 regular students who study in 3,021 primary schools, 374,569 regular students who study in 968 junior secondary schools and 187,497 regular students who study in 499 senior secondary schools, while 5,308 students with special needs study in 86 special schools.

5.1.5. Statistical Analysis

The Microsoft Excel 2003 and the Statistical Package for Social Sciences (SPSS) 15.0 for Windows Evaluation version were used for statistical exploration of the data. The statistical analysis will be described according to the research questions as follows:

Research question 1: What are the attitudes of teachers toward the inclusion of students with visual impairments in regular classrooms? Analysis of research question one includes examining descriptive statistics (mean, median, mode, variance, and standard deviation) of teachers' attitude toward the inclusion of students with visual impairments. All appropriate descriptive statistics used to analyze the

data and present data summaries about teachers' attitude toward the inclusion of visual impairment students in DKI Jakarta.

Research question 2: How do attitudes differ among teachers in primary schools, junior secondary and senior secondary schools? Analysis of research question no.2 includes one way ANOVA to examine the differences among three groups of teacher in DKI Jakarta.

H_0 = There are no differences in attitude toward the inclusion of students with visual impairments among teachers in elementary, junior secondary and senior secondary schools.

H_1 = There are differences in attitude toward the inclusion of students with visual impairments among teachers in elementary, junior secondary and senior secondary schools.

Research question 3: What factors influence successful inclusion of students with visual impairments in regular classes according to elementary and secondary regular teachers in DKI-Jakarta. This research question yielded various answers, thus the answers were abstracted and summarized into several aspects to describe which is the most influential aspect for successful inclusion of students with visual impairment in DKI Jakarta.

6. Results

6.1. Teachers' attitude toward the inclusion of students with visual impairments.

The answer of the first research question will be described in Attitudes toward the Inclusion of Students with Visual Impairments Questionnaire.

The mean, median, mode, variance, standard deviation, range, kurtosis, and skewness were used to answer the question of the general teachers' attitude according to Attitudes toward the Inclusion of Students with Visual Impairments Questionnaire (See table 14).

Table 4. Descriptive Statistic of Attitudes toward the Inclusion of Students with Visual Impairments Questionnaire

Description	Value
<i>N</i>	207.00
Mean	34.35
Median	34.00
Mode	33.00
Variance	67.63
Range	46.00
Std. Deviation	8.23
Kurtosis	0.25
Skewness	-0.24
Total number of Negative attitudes (score 1-34)	105.00 (51.21%)
Total number of Positive attitude (score 36-70)	90.00 (43.00%)
Total number undecided attitude (score 35)	12.00 (05.80%)

The total scores showed that 51.21% of teachers have negative attitudes toward the inclusion of students with visual impairments and 43% teachers showed positive attitude. Skewness and kurtosis scores showed that the data have normal distribution. The range of the total score is from 6 to 52. The mode score is 33, slightly under the median and mean scores, thus, it can be concluded that teachers' attitudes toward students with visual impairments are negative. However, 5.80% of the teacher have no strong attitude, thus it categorized as undecided attitude.

Factors in the Attitudes toward the Inclusion of Students with Visual Impairments Questionnaire are as follows:

(1) Social aspects

The descriptive statistic for the teacher's social aspect in this questionnaire is as follows. See table 15.

Table 5. Descriptive Statistic of Social Aspect

Description	Value
<i>N</i>	207.00
Mean	15.85
Median	16.00
Mode	15.00
Variance	18.50
Range	24.00
Std. Deviation	4.30
Kurtosis	0.34
Skewness	-0.35
Total number of Negative attitudes (score 0-11)	36.00 (17.4%)
Total number of Positive attitude (score 13-24)	159.00 (76.8%)
Total number undecided attitude (score 12)	12.00 (05.8%)

The total score of social aspects showed that, 76.8% of teachers had positive attitude toward the inclusion of students with visual impairment in social aspects, with the lowest total score is zero and the highest total score is 24. However, twelve teachers still showed no tendency in attitude, thus it is categorized as undecided attitude.

This paragraph describes the item analysis for social aspect. Social aspect consists of six statements, 71 % teachers are strongly agree that inclusion increased the child's circle of friends and they also assumed that sighted children will be happy to mingle with students with visual impairments and it will increase the appreciation of sighted children toward their friend who has visual impairments. Furthermore, teachers disagreed if inclusion would give negative effects to social development of other children. Another finding showed that teacher disagreed if inclusion would increase the amount of social rejection by the child's peers.

Table 6. Item Analysis for Social Aspect

Item	Strongly disagree <i>n</i> (%)	Disagree <i>N</i> (%)	Undecided <i>n</i> (%)	Agree <i>n</i> (%)	Strongly Agree <i>n</i> (%)
1. Increase the child's circle of friends	8 (3.9%)	10 (4.8%)	22 (10.6%)	20 (9.7%)	147 (71%)
3. Make the child less well-adjusted socially	29 (14%)	72 (34.8%)	16 (7.7%)	57 (27.5%)	33 (15.9%)
4. Ensure that sighted children will be happy to play with blind children	4 (1.49%)	21 (10.1%)	63 (30.4%)	45 (21.7%)	74 (35.7%)
6. Have a negative effect on the social development of other children	22 (10.6%)	83 (40.1%)	27 (13%)	56 (27.1%)	19 (9.2%)
9. Increase the amount of social rejection by the child's peers	35 (16.9%)	77 (37.2%)	22 (10.6%)	54 (26.1%)	19 (9.2%)
10. Ensure that sighted children will be more appreciative of blind children	5 (2.4%)	7 (3.4%)	42 (20.3%)	37 (17.9%)	116 (56%)

(2) Academic Aspects

The descriptive statistic for the teacher's social aspect in this questionnaire is as follows (See table 17).

Table 7. Descriptive Statistic of Academic Aspect

Description	Value
<i>N</i>	207.00
Mean	10.42
Median	11.00
Mode	12.00
Variance	7.77
Range	15.00
Std. Deviation	2.78
Kurtosis	-0.18
Skewness	-0.11
Total number of Negative attitudes (score 0-7)	32.00 (15.45%)
Total number of Positive attitude (score 9-16)	152.00 (73.44%)
Total number undecided attitude is: (score 8)	23.00 (11.10%)

The total score of academic aspects showed that, 73.44% of teachers have positive attitude toward the inclusion of students with visual impairment, with the lowest total score is one and the highest total score is 16. However, 23 teachers had not have specific attitude and is categorized as undecided attitude. The next paragraph describes the item analysis for academic aspect.

Social aspects consists of four statements, 65.52 % teachers are strongly agree that inclusion develops a stronger feeling of self-confidence in children about his/her academic ability. More than fifty percent teachers agreed that inclusion would provide more opportunities for other children to

benefit from specialized instruction of the blind child. Another finding showed that teachers disagree if inclusion limited the child's level of academic performance. However, 25.6% teachers assumed that inclusion worsen the child's learning problem, while 34.8 % disagree.

Table 8. Item Analysis for Academic Aspects

Item	Strongly disagree <i>n</i> (%)	Disagree <i>N</i> (%)	Undecided <i>n</i> (%)	Agree <i>n</i> (%)	Strongly Agree <i>n</i> (%)
2. Limit the child's level of academic performance	36 (17.4%)	86 (41.5%)	21 (10.1%)	54 (26.1%)	10 (4.8%)
5. Worsen the child's learning problem	26 (12.6%)	72 (34.8%)	30 (14.5%)	53 (25.6%)	26 (12.6%)
7. Provide more opportunities for the other children to benefit from the specialized instruction of the blind child	16 (7.7%)	33 (15.9%)	47 (22.7%)	43 (20.8%)	68 (32.9%)
8. Develop a stronger feeling in the child of confidence in his/her academic ability	2 (1%)	11 (5.3%)	27 (13%)	32 (15.5%)	135 (65.2%)

(3) Teachers' Competence/Willingness Aspect

The descriptive statistic for the teacher's competence/willingness aspect is as follows (See table 19).

Table 9. Descriptive Statistic of Teachers' Competence/Willingness Aspect

Description	Value
<i>N</i>	207.00
Mean	8.18
Median	8.00
Mode	8.00
Variance	9.93
Range	16.00
Std. Deviation	3.15
Kurtosis	0.26
Skewness	-0.40
Total number of Negative attitudes (score 0-7)	77.00 (37.19%)
Total number of Positive attitude (score 9-16)	100.00 (48.31%)
Total number undecided attitude (score 8)	30.00 (14.49%)

The total score of Teachers' competence and willingness aspects showed that, 48.31% of teachers have positive attitude toward the inclusion of students with visual impairment slightly above the negative attitude, with the lowest total score is zero and the highest total score is 16. However, 30 teachers had not have specific attitude and is categorized as undecided.

This paragraph will describe the item analysis for teachers' competence/willingness aspect. For teacher's competence and willingness, more than 50% teachers assumed that they don't understand problems associated with blindness, thus 44% teachers strongly agree that they don't make appropriate educational provisions for blind children in regular classes. They also agreed that they are well-prepared to teach blind children effectively. However, 40% teachers do not know whether they are happy or not to have blind children in their class.

Table 10. Item Analysis for Teachers' Competence/Willingness Aspect

Item	Strongly disagree <i>n</i> (%)	Disagree <i>N</i> (%)	Undecided <i>n</i> (%)	Agree <i>n</i> (%)	Strongly Agree <i>n</i> (%)
11. Do not understand problems associated with blindness	16 (7.7%)	44 (21.3%)	27 (13%)	62 (30%)	58 (28%)
12. Do not make appropriate educational provisions for blind children in regular classes	11 (5.3%)	30 (14.5%)	36 (17.4%)	39 (18.8%)	91 (44%)
13. Are well-prepared to teach blind children effectively	9 (4.3%)	20 (9.7%)	43 (20.8%)	34 (16.4%)	101 (48.8%)
14. Are happy to have blind children in their classes	12 (5.8%)	14 (6.8%)	83 (40.1%)	46 (22.2%)	52 (25.1%)

6.1.2. Attitude differences among teachers in elementary, junior secondary and senior secondary schools

Table 11, 12 and 13 showed the value of the homogeneity, ANOVA, and value differences from the SPSS 15.0 program.

Table 11. Test of Homogeneity of Variances of Q2

Levene Statistic	<i>df1</i>	<i>df2</i>	Sig.
2.431	2	204	.090

Table 12. ANOVA of Q2

	Sum of Squares	<i>Df</i>	<i>M</i> ²	<i>F</i>	Sig.
Between Groups	154.496	2	77.248	1.144	.321
Within Groups	13776.760	204	67.533		
Total	13931.256	206			

$p \leq 0.05$

Table 13. The Differences of Value among Three Groups of Teacher

(I) School Level	(J) School Level	Mean Difference (I-J)	Std. Error
Elementary School	Junior Secondary School	-.58564	1.39263
	Senior Secondary School	-2.04557	1.38145
Junior Secondary School	Elementary School	.58564	1.39263
	Senior Secondary School	-1.45993	1.43071
Senior Secondary School	Elementary School	2.04557	1.38145
	Junior Secondary School	1.45993	1.43071

As shown in table 24, the significant value is 0.321 bigger than significant coefficients values ($p \leq 0.05$), thus Null hypothesis is accepted. Table 25 and 26 showed that there is no difference about general teachers' attitude toward the inclusion of students with visual impairments among teacher in elementary, junior secondary, and senior secondary. The homogeneity test showed that all the groups are homogeny.

6.1.3. Successful Factors for Inclusion of Students with Visual Impairments in Regular Classrooms

The last questionnaire of the survey asked participants to write factors which influence a successful inclusion of students with visual impairments in DKI-Jakarta. This information was abstracted and summarized into eight factors. The result of those responses is ranked as follows:

Table 27. Successful Factors for Inclusion

No	Factor	N	%
1	Facilities and infrastructures	168	79.62%
2	Teachers	139	65.88%
3	The student with VI	54	26.90%
4	Environment	54	26.90%
5	External factors	35	16.58%
6	Peers	30	14.28%
7	Parent and family	22	10.43%
8	Teaching method and curriculum	8	3.79%

The first ranked factor of successful inclusion, according to the teachers on this study, is facilities and infrastructures that include materials and tools for study such as Braille books and other things that used tactile sensory, a resource room and special education teacher for students with visual impairments. The second ranked for successful inclusion is the teacher factor which includes teachers' support and acceptance of student with visual impairments, teachers' training and teachers' competence in teaching students with visual impairments. Then, the third factor that influences successful inclusion is the student with visual impairments itself. Teachers assume that student with

visual impairments has to be an active, smart, and self-confident. In addition, student with visual impairments has to be ready to mingle and participate in students or school activities. The level of blindness also becomes one of the factors that influence successful inclusion.

The next factor for successful inclusion is an environment, such as support from administrations staffs and principals. The principal, according to the teachers, should provide a policy for inclusive classroom and facilitate every teacher who has problems in handling student with visual impairments. External factors such as program socialization, collaboration among community-school-government, funding for the program, and government support for teacher's welfare plays a part in successful inclusion. Some teachers also assumed that peers' acceptance and support also played a role for successful inclusion of student with visual impairments in regular classroom. Support and parent's participation in school activities is another factor for successful inclusion. Support from parents to help the student with visual impairment in completing their homework also needed at home. The last factor that influences successful inclusion is teaching method and curriculum for students with visual impairments, which is related to school's infrastructures.

7. CONCLUSIONS

This study examined elementary and secondary general teachers' attitude toward the inclusion of students with visual impairments in a regular classroom in DKI-Jakarta, Indonesia. This chapter will start with conclusions of the findings in this study, followed with limitation and implication of this study, ended with recommendations for further studies and the participants of this study.

7.1. Summary

Firstly, the Attitude toward the Inclusion of Visual Impairments Students' Questionnaire that assessed teachers' attitude toward the inclusion of students with visual impairments showed slightly over 50% of the teachers have negative attitude on the inclusion of students with visual impairments in regular classrooms. This result conforms the previous research that teacher's blindness is more negatively evaluated than other physical disability (Whiteman & Lukoff, 1965, cited in Verplanken & Meijnders, 1994). Interestingly, if we analyzed each aspect on this instrument, teachers showed more positive attitude. The summary of each aspect is as follows:

Social aspect consists of six items, but only one item showed strong positive attitude of teachers in this study, which is teachers assumed that inclusion of student with visual impairments increases the child's circle of friends (71%). Teachers disagree if inclusion increases the amount of social rejection by the child's peers but on the other hand, they were not sure that sighted children will be happy to play with them. Teachers assumed that sighted children would be more appreciative to blind children in inclusion.

However, 40% of the teachers thought that inclusion makes the child less well-adjusted socially. In this aspect, about 10-30% teachers had not had a strong feeling about the effect of inclusion on social aspect. Despite the facts that there are some disagreements, in this aspect teachers had positive attitudes toward the inclusion of students with visual impairment. These results above showed that student with visual impairments are socially accepted in regular class, but still some teachers doubted it. In academic aspect, 73.44% of the teacher showed positive attitude toward academic aspect that is exposed in four items. Teachers assumed that inclusion class provides more opportunities for other children to benefit from the specialized instruction of the blind children; also it would develop a stronger feeling of confidence in the child about his/her academic ability. Teachers in this study disagreed if the inclusion limit the child's level of academic performance, or worsen the child in learning a problem. Even though some teachers showed undecided attitude in this aspect, the overall result showed a positive attitude. This result has an implication for teachers, if they believe that inclusion would benefit for all students, they would teach with all of their heart and would listen to all students' needs.

In teacher's competence/willingness aspect, 48% of the teachers showed positive attitude, 14.49% of the teachers had undecided attitude and 37% of the teachers showed negative attitude. More than 50% of the teachers did not understand the problems associated with blindness, and it made them had difficulties to prepare the educational provision for blind children in their classes. However, despite of all their limitation they had tried to prepare to teach blind children effectively. Forty percent of the teachers had undecided feeling about having blind children in their classes. It can be concluded that the teachers were mentally well prepared to teach students with visual impairment even though there was a lack of appropriate materials and tools. It can be imagined that students with visual impairments on the regular classes study with limited resource and inappropriate material or tools.

Secondly, result in this study about attitude differences among teachers in elementary, junior secondary and senior secondary schools proved that there are differences in attitude among teachers in elementary, junior secondary, and senior secondary toward the inclusion of student with disabilities. Teachers in senior secondary showed more positive attitude than teachers in elementary and junior secondary schools did. Among the three, the elementary school teachers have the lowest positive attitude. This result conforms the study by Leyser et al. (1994, cited in Avramidis & Norwich, 2002) in which senior high school teachers displayed significantly more positive attitudes toward integration than did junior high school and elementary school teachers, and junior high school teachers were significantly more positive than elementary school teachers were. The explanation for this result is that more adaptation is needed for younger children with disabilities rather than older students with

disabilities, thus teachers in elementary should make more efforts for their disabilities students. This condition caused unfavorable condition for the teachers and leads to negative attitude.

The results on the teacher's attitude toward the inclusion of students with visual impairment questionnaire showed that, there is no difference among teachers in elementary, junior secondary and senior secondary schools. It means that all teachers in elementary, junior secondary, and senior secondary showed negative attitudes toward the inclusion of student with visual impairments in regular classrooms. This result showed the same result as the study by Mushoriwa (2001) in Zimbabwe, in which teachers' attitudes were found negative toward the inclusion of visual impairments.

Thirdly, successful factors for inclusion of students with visual impairments in regular classrooms are divided into eight factors. According to the teachers in this study, the first rank factor for successful inclusion of students with visual impairments in regular classes in DKI-Jakarta is facilities and infrastructure. It means that teachers in this study thought that facilities and infrastructures are the most important factor for successful inclusion of students of visual impairments in regular classrooms. Consider that students with visual impairments need many adaptations for their study (such as Braille book, tactile stimulation or big screen), it might caused hesitation in teachers to include students with disabilities in their regular classes. The favorable condition of teachers in DKI Jakarta is that they showed willingness to include students with disabilities in their classes. Thus, if the barriers in facilities and infrastructures are solved teachers in DKI Jakarta will include students with visual impairments involuntarily. Bricker (2000) stated that appropriate materials, equipments, and environment are the factors needed for successful inclusion. The environment and equipment determine what kind of curriculum will be used in daily teaching for students with visual impairments.

Other major problem found in this study is insufficient training and development for regular teachers related to inclusive education. According to Scruggs and Mastropieri (1996), training or coursework can increase awareness of techniques for mainstreaming, also in-service training was valuable in enhancing teachers' skills and the attitude toward the inclusion became more positive. Only small number of teachers (20%) in this study had training for inclusive education. This condition will make teacher not able to provide appropriate teaching method and materials for the students with visual impairments. On the other hand, it will make students with visual impairments hardly meet their needs. Training is needed not only for handling students with disabilities, but it would be beneficial for teachers to develop their ability. Insufficient training would lead to teacher's hesitation to teach student with disabilities, particularly student with visual impairments.

Indonesia as a developing country still faces many problems in special education. From demographic data, the ideal class size only experienced by small number of teachers, most of the

teachers have 30-40 students in a class, and without teachers' assistant, it would be very difficult to handle student with visual impairment who needs a different technique in learning. Another study in Republic of Korea showed that the number of children with disabilities has significant influence in inclusion (항선춘, 2004). The teacher suggested that there should be three students with disabilities and an assistant teacher per class to achieve an effective educational environment. Teachers in Indonesia have no opportunity to experience this privilege.

However, there are some favorable conditions for inclusive education in Indonesia, especially to promote positive attitude among regular teachers toward the inclusion of students with visual impairments. The first condition is government's support for inclusive education system that is followed by some movement to promote inclusive education such as funding for inclusive school, and socialization of inclusive education in mass and electronic media. The second favorable condition is the support from international institute/NGOs to promote inclusive education. Usually, institutes/NGOs work based on the needs in the field, while the government worked based on program and policies. However, both of the parties make collaboration that benefit for the inclusive education system in Indonesia. Evidence showed many projects run by institute/NGOs had helped government to achieve national education goal. A study in Republic of Korea confirmed that collaboration among teacher, school, and government is important factor for successful inclusion (한성희, 1996).

The factors of successful inclusion that are found in this study showed similarities with the factors from Bricker (2000), but several factors are found only in this study such as external factors which include teacher's hope for additional salary for regular teacher who handles a student with visual impairment. Considering that teachers' income in Indonesia are much below than other teachers in the neighboring countries (such as Malaysia, Brunei and Singapore), even though in Indonesia teachers profession receive slightly higher income than other civil servants, it becomes reasonable if all these factors seemed to lower the teachers' productivity.

7.2. Limitations

Several limitations were found in this study. First, revision of the instruments is needed, although the overall reliability and validity are good, but reliability for each dimension is not good enough, considering the good value for reliability should be at least 0.7. It can be caused by the use of different language. Thus, for the next study, pilot study is needed to strengthen the validity and reliability in each dimension. The second, it would be better if there were a session for teacher's interview, particularly for the last question about successful inclusion. This study only probed about unclear responses but not for the whole participants' idea about factors, which promotes successful inclusion. The third, the purpose of this study is to give some inputs for schools and government as a decision

maker, but there is no confirmation from government about the real condition, all data from the government were taken from website or published books by the Ministry of National Education. For that reason, a fair statement cannot be made for all parties. Lastly, compare to the number of teachers in all over DKI Jakarta, the participants in this study is small. Thus, it is not enough to make a generalization. Further study that involves more participants is needed to make a robust result.

7.3. Implications

This study has several implications for all parties who are involved with inclusive education in Indonesia. For teachers, despite the lack of support for inclusive education system, they should provide the best environment for student with visual impairments to study in the regular class. Teachers could make collaboration with the principal and community, especially the family of students with disabilities or visual impairments. For the family of students with visual impairment, they could provide support for their child; not only at home but also at the school with the collaboration with teachers and principal. Considering that there are many NGOs in Indonesia, the parents and teachers could ask some supports (such as tools and materials) for the students either at school or at home. Particularly for teachers, they could seek funding to improve their ability in handling students with disabilities through training and development. The implication for school (and principals) is the school should facilitate teachers' need to teach students with visual impairments, to minimize barriers and encourage teachers to accept the inclusion of students with visual impairment.

The recommendations from this study are intended for teachers, parents, school and government, are as follows:

- (1) Parents should support and participate in child's activities. The participation is also intended to promote the inclusive education in Indonesia.
- (2) Teachers should open their mind especially to include students with visual impairments in a regular classroom. The main barrier for students with disabilities in a regular classroom is material and tools for study. Once those barrier are removed, students with visual impairments could study as normal as regular students. Teachers should be more active to find resources and help their students with disabilities, particularly students with visual impairments. The resource center in every municipality in DKI-Jakarta can be used as a resource for teachers to solve their problems related to students with visual impairments.
- (3) School as an education institute should provide facilities for the inclusion of students with visual impairments. To solve these barriers, the school could make collaboration among teacher, parents, and community. The school could also ask support from the governments or NGOs. In addition, the principals as a leader in the school should encourage teachers to have

more positive attitude toward the inclusion of students with visual impairment, since the results in this study showed that despite the lack of training of inclusive education, teachers are willing to teach student with disabilities.

- (4) Government as a decision maker in education, particularly in special education should provide facilities for support the implementation of inclusive education in Indonesia. The most important thing is facilities and infrastructures for students with visual impairments. The second most important thing is the training for regular teacher who has students with visual impairments in their class.

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