Evaluation of Public Special School Environment (case: SLB Negeri Ungaran)

*Bangun I.R. Harsritanto**, *Dessy Oktavia*, *Mira Annisa Rezeki*, *Hermin Werdiningsih*

Architecture Department, Engineering Faculty, Universitas Diponegoro, Semarang, Indonesia

Abstract. Information of design standard often become debatable condition in construction process. That condition brought different performance of building especially public building such public special schools. This paper aimed to emphasize the design regulation on special school by evaluating a public special school in Semarang Regency SLB Negeri Ungaran. The standard of education building standard of PERMENDIKNAS RI No. 33/2008 was being resumed into design criteria, then it became the evaluation sheet to value the case. The result of this research shown that most of the mandatory space already being built but the details were not designed as the standards.

1 Introduction

Education is a human right which being mandated on Indonesia's basic constitution UUD 1945 verse 31 (1) as mentioned that "every citizen have right in education" [1]. Every citizen as described before also included the people with disabilities. The derivatives constitution was published on regulation UU no 20/2003 verse 5 (2) which said "every citizen with physical, mental, emotional, social disabilities have right to study on special education facilities" [2].

However, we found citizen with disabilities with no proper education of 12 years mandatory basic education in the real condition. Indonesia citizen with disabilities estimated 12.5% of all citizen but 45.57% of them were never graduated from elementary school [3, 4]. Data of 14 Indonesia provinces shown that 60% of student age citizen with disabilities were not schooled [5]. The biggest problem for citizen with disabilities in gaining education is no open access for them to study in special education facilities [6].

Indonesia has more than 4929 special schools from kindergarten until high school grade with 28914 class on them [7]. But 73% of students were studied in private school and the remain 27% attended the public school [8]. This condition indicated that government/public schools were not provided the good performance in serving the citizen with disabilities [9]. Nowadays the ministry of education has planned to build 25 until 30 special schools in a year to serve national education for all citizens [10]. Furthermore, the demand of quantities in every city/regency is more than a special school with its facilities shall be the national priority, since some region has very large population and coverage area [11].

Above situation brought a massive construction in special education facilities in every region in Indonesia [12]. However, the mass production often not followed by proper

* Corresponding author : bangunirh@arsitektur.undip.ac.id

qualities in construction [13]. Until today, Indonesia has set national standard in education facilities on Ministry of education decree no.33/2008 about special school (SLB) design standard (Indonesia: permendiknas No. 33 Tahun 2008 tentang Standar Sarana dan Prasarana Sekolah Dasar Luar Biasa, Sekolah Menengah Pertama Luar Biasa, dan Sekolah Menengah atas Luar Biasa SMALB). The national standard has already set for 12 years but the realisation is still in progress.

Ungaran is a regency next to the Central Java Capitol City, Semarang. This area is rural-urban (rural urban area) which still developing its infrastructure to match the region aims. One of the infrastructures is education facilities and special education which is the main subject for this research. SLB Negeri Ungaran is Public Special School which built and fully supported by government to give education to the student with disabilities and special needs in Ungaran.

This research purpose is to resume an evaluation sheet of special school design guideline then to evaluate SLB Negeri Ungaran as a case study. This evaluation sheet was set from the ministry of education regulation no 33/2008 about standard of special schools. Later on the regulation being simplified into guideline criterion tables, so it can be more convenient in evaluating the special schools in the future. The result of this evaluation is SLB Negeri Semarang has failed to some education facilities standard especially in student and teacher communal spaces.

2 Methods

Literatures study and cases study were used as research methods. Evaluation study main power is the set of evaluation sheet which later on being baseline in evaluating the objects [14, 15, 16]. This study carries the main literatures of Indonesia education facilities standards (Permendiknas no 33/2008) which being modified to be more operational friendly for evaluation researches. Furthermore, the constructed evaluation sheet will be assessed to physical aspect on SLB Negeri Ungaran case studies in Indonesia.

The evaluation consists of two main parameters of the availability and the space standard. The parameters were closely related to universal design principle of safety, supportive, adaptability and accessibility [17]. The available items were describing the basic effort in understanding the space requirements (safety and supportive) about the special education facilities. Furthermore, the space standard showed the adaptability and accessibility efforts of the school to meet the special needs educations.

3 Results and discussion

3.1 The Regulation of Special School

Special School is a school for special needs and diffable students with a special curriculum and facilities which being provided to support the students [18]. According to the verse 32 (1) of National system of education no 20/2003, the Special schools (SLB) have 4 type of special education criteria, such as:

1. SLB A, for visual disabilities students
2. SLB B, for audial disabilities students
3. SLB C, for mental disabilities students (in degree of illness, C1 for the severe and C2 for the light)
4. SLB D, for the handicapped movement disabilities students

As mentioned before this SLB is having special curriculum which different from the national one. The main subject of religion, sciences, social sciences, civic, languages,

mathematics, arts and sports in this SLB still being taught by the teachers and the special subjects of orientation-mobilities, communication-sound, movement developments, and self-improvement are also being educated for the students.

The physical requirement has been set by the ministry of education in their decree and local government rules to bring a good facility of SLB according to the students' quantity and the curriculum. From the standard we can assumed the minimum requirements as described in table 1 below. Later on, this evaluation sheet become the base in SLB Negeri Ungaran examination.

Table 1. Special school facilities

No	Facilities	Minimum standards
1	Class	3 m2/ student
2	Library	30 m2
3	Orientation-Mobilities class	15 m2
4	Communication class	4 m2
5	Sound class	30 m2
6	Self-improvement class	24 m2
7	Movement class	30 m2
8	Art class	24 m2
9	Wooden art class	24 m2
10	Ceramic art class	24 m2
12	Workshop	24 m2
13	Sewing class	24 m2
14	Computer class	24 m2
15	Kitchen	As demand
16	Painting class	24 m2
17	Music class	24 m2
18	Dancing class	24 m2
19	Parlour class	24 m2
20	Crafting class	24 m2
21	Exhibition room	24 m2
22	Hall	As demand
23	Archery class	As demand
24	Swimming pools	As demand
25	Head master room	12 m2
26	Teacher room	4 m2/ teacher
27	Administration room	4 m2/ staff
29	Worshiping space	12 m2
30	Healthcare	12 m2
31	Consultation room	9 m2
32	Student welfare room	9 m2
33	Toilet	2 m2/ unit
34	Storages	18 m2
35	Circulation space	30% of area
36	Sports	as demand

3.2 Briefs of SLB Negeri Ungaran (Study Case)

Special School of SLB Negeri Ungaran is located on Jl Kyai Sono 2, Genuk, Kec. Ungaran Barat, Kab. Semarang Prov. Jawa Tengah as described on the picture 1. It has 9983 m² area, since 1983 and has B accreditation. The site has boundary of north: SMP N 1 Ungaran, east: RSUD Ungaran, South : Hotel Melati Serba Dua and west: Watu Lumpang swimming pools (see figure 2). The condition of rural-urban area still related to the SLB environments and potential to be next development of school areas.

Current situation of 2020, SLB Negeri Ungaran is having class (students), as : TKLB A (3), TKLB B (8), TKLB C (5), SDLB A (2), SDLB B (30), SDLB C (15), SDLB C1 (38), SDLB D (9), SDLB Q (6), SMPLB (56), SMALB (43) and having supporting teachers 34 in total. Therefore, the capacity of the SLB Negeri shall meet the space requirement of these users.

Fig. 1. The locator of SLB Negeri Ungaran

The street of Kyai Sono is wide enough to be accessed by cars and buses. That condition supported SLB Negeri Ungaran for the environment connectivity and near this site there also a Vocational School (SMK) Kanaan and District office Kantor Kelurahan Genuk for the social facilities (see figure 2). This area land use is blue colour or dedicated for social and public facilities area of Ungaran regency, so the urban network also connected to this area.

Fig. 2. The map of SLB Negeri Ungaran (source: google map view)

This SLB Negeri Ungaran is consist of several buildings or considered as multi building for education purpose. The main 8 buildings are office, exhibition room, class, art class, mushola, canteen, dormitory, and multifunction room (see figure 3). The buildings are connected by landscape design and corridors. The site shape is quite irregular with narrow front side and wider rear side just like pocket plot. This condition is related to the government land on the site that need to be separated into several divisions.

Despite irregular site of the SLB Negeri Ungaran, the design of this school was attached on the grid order with street/connector orientation. The front side of the site is the place for the office and exhibition, and the remains spaces are located on the rear side (see figure 3).

Fig. 3. The Siteplan of SLB Negeri Ungaran (Source: SLB Negeri Ungaran documents)

3.3 Evaluation Results

There are three main type of spaces in this SLB Negeri Ungaran, such as: offices, classes and therapy rooms. The offices are consisting of the head master, administration and teacher office. The classes were divided into TKLB (kindergarten), SDLB (elementary), SMPLB (junior high school) and SMALB (senior high school). The Therapy rooms are Orientation-Movement room, sound room, consultation room and healthcare. The remain supporting room such as: library, storage, toilet, worshipping (mushola), sport and student welfare room were built to support the main education activity of this SLB (see table 2). The main three type of space, later on being the structured descriptive analysis to examine and evaluate the physical condition of this SLB Negeri Ungaran.

Table 2. SLB Negeri Ungaran evaluation results

No.	Facilities	availability	count	Standard area (m2)	Existing area
1	TKLB Class	v	3	12 m2	20 m2
2	SDLB Class	v	36	15	16
3	SMPLB Class	v	18	15	20
4	SMALB Class	v	15	15	20
5	Library	v	2	30	32
6	Orientation Mobility room	-	-	-	-
7	Movement therapy	-	-	-	-
8	Self-Development space	-	-	-	-
9	Sound therapy	v	1	4	20
10	Headmaster office	v	1	12	12
11	Teacher room	v	1	4/teacher (4x34=136)	72
12	Administration room	v	1	4/staff (4 x 4 = 16)	20
13	Worshipping place	-	-	-	-
14	Health care	V	1	12	16
15	Consultation room	V	1	9	12
16	Toilet	V	4	2	3
17	Storage	V	2	18	20
18	Sport room	V	1	200	96
19	Circulation space	V		30% total area (30%x9983 = 2994.9)	±3000
20	Student welfare	-	-	-	-

Related to the evaluation table 2 above, there are several facilities that has been designed and well capacity. The classes were well designed and built as shown that all of it are fulfilled the standards. From this condition, we can assume that this SLB orientation is for the basic class requirements, since all of the class has met the mandatory regulation.

In other hand, the therapy rooms were not well provided by the SLB. It shown on the absences of OM room and movement therapy. However, the presence of sound room, consultation room and health care in this SLB is still well designed. These conditions may assume as this school is closely related to SBL type B for audial disabilities students.

The absences of in site worshiping place, lack of sport room and library has brought low result in this facilities evaluation based on the Permendiknas. The worshiping place of this SLB is shared with Kantor Kelurahan's Mushola as mentioned on the previous map. Sport room also shared with the kelurahan soccer field and the library is still below the standards.

In historical background, this SLB Negeri Ungaran was a special school for the deaf students or type B only. So, the facilities of audial disabilities were already existed before the built of this SLB. The previous tales also mentioned that this site is government land which being separated into several division, so the sport and religion worshiping facilities are shared with other government unit in this area. Furthermore, these conditions were happened because the development of rural into rurban area of Ungaran regency is still on process.

In the future the improvement of the SLB facilities still can be performed with vacant land spot near this site. This research also can be a guideline for further correction and improvement to make this SLB Negeri Ungaran become better special school for many types of disabilities students and community.

4 Conclusion

The result of this research shown that most of the mandatory space already being built but the details were not designed as the standards. The development of special school was related to previous function of the school and the condition of the surroundings. Further development of special school (SLB) shall follow the basic regulation of Permendiknas no 33/2008 about Indonesia education facilities standards.

References

1. _____. Indonesia State Constitution 1945 verse 31 (1) (1945)
2. _____. Constitution no. 20/2003 about National Education System (2003)
3. <https://www.kemdikbud.go.id/main/blog/2017/02/sekolah-inklusi-dan-pembangunan-slb-dukung-pendidikan-inklusi> accessed on february 2020
4. Maulipaksi, D. Sekolah Inklusi dan Pembangunan SLB Dukung Pendidikan Inklusi. Jakarta: Kemendikbud (2017)
5. <https://bulelengkab.go.id/assets/instansikab/126/bankdata/kementerian-sosial-dalam-rangka-pembangunan-kesejahteraan-sosial-th-2012-57.pdf> accessed on february 2020
6. <https://media.neliti.com/media/publications/104646-ID-peran-dinas-pendidikan-dan-kebudayaan-pr.pdf> accessed on february 2020
7. M. Paristiawan, A. Taufiq, and P. ., "Peran Dinas Pendidikan dan Kebudayaan Provinsi Jawa Tengah dalam Pengembangan Sekolah Luar Biasa (SLB) di Semarang," Journal of Politic and Government Studies, vol. **6**, no. 03, pp. 411-420 (2017)
8. Indonesia, A. Terbatas, Daya Tampng Sekolah Luar Biasa. Indonesia: Education News Monitoring Service (2017)
9. Soleh, A. Aksesibilitas Penyandang Disabilitas terhadap Perguruan Tinggi. Yogyakarta: PT. LKiS Printing Cemerlang (2016)
10. Susilawati, D. Indonesia Miliki 12 Persen Penyandang Disabilitas. Jakarta: Republika. (2016).
11. Tuslina, T. *Perkembangan Pendidikan Anak Berkebutuhan Khusus di Indonesia* (2012)

- Retrieved 09 05, 2017, from Kompasiana.com:
http://www.kompasiana.com/tanamilmu/perkembangan-pendidikan-anak-berkebutuhan-khusus-di-indonesia_55107ad1a33311273bba8243
12. Yani, A. A. *Kelalaian Negara Memenuhi Hak Warga Difabel*. Makassar: Tribun Timur (2013)
 13. Indonesia Minister of Education and Culture (2008) Minister of Education and Culture no 3 th 2008 about Inclusive Education Process Standard
 14. Harsritanto, B. I. Sustainable Streetscape Design Guideline based on Universal Design Principles. MATEC Web of Conferences 159 (2018)
 15. BIR, Harsritanto. E3S Web of Conferences 31, 09010 (2018)
 16. Bangun IR Harsritanto, Indriastjario, Wijayanti. Universal design characteristic on themed street, IOP Conf. Series: Earth and Environmental Science **99** 012025 (2017)
 17. B I R Harsritanto et al. IOP Conf. Ser.: Earth Environ. Sci. 313 012028 (2019)