

The Accessibility of Pedestrian Lane in SebelasMaret University for Children with Special Needs

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Abstract

The purpose of this research is to know the pedestrian lane in SebalasMaret University for children with special needs. The research approach used is quantitative research with descriptive method. Data collection tool used is observation and documentation. The result of data is examined based on Public Works Ministry Decree of Republic Indonesia No. 468/KPTS/1998. Based on the regulation there is the principle of accesibility and pedestrian path elements. Based on the 4 principle of accesibility and 7 pedestrian path elements, it can be concluded that the pedestrian lane in SebelasMaret University not accessible for children with special needs, so in need of repair in order to satisfy the rights of the children with special needs a good carry special education or just for a visit in Sebelas Maret University.

Keywords - Accessibility, Pedestrian Lane, Children with special needs

I. INTRODUCTION

According to the regulation of Public Works and Public Housing Ministry of Republic Indonesia Number 14/PRT/M/2017, accessibility is a convenience provided for everyone to realize equal opportunities in all aspects of life and livelihood. Accessibility can be described as flexibility facility to accommodate every needs of people with disabilities so they can access their needs easily (Department of Economic and Social Affairs of United Nations, 2015). So that can be concluded that accessibility is a convenience provided for everyone especially for people with disabilities to realize equal opportunities in all aspects of life. According to the Decree of the Public Works Ministry of Republic Indonesia No. 468/KPTS/1998 there are 4 principles of accessibility; convenience, usability, safety and independence.

According to the Decree of the Public Works Ministry of Republic Indonesia No. 468/KPTS/1998, accessibility have some principle, one of the principles is every construction of public building site must pay attention to the technical requirements of accessibility on the basic size of the room, pedestrian

path, guide path, parking area, ramp and signs. Pedestrian is every person who travels by walking and some pedestrians use various modifications and help to walk like wheelchairs and sticks (World Health Organization, 2013), meanwhile pedestrian lane is the outer space used for people activities such as walk (Maulliani, Ari, Wafirul, 2015). The pedestrian lane should be available in various public spaces, one of them is on campus where the campus is a place where students including persons with disabilities conduct various activities.

Child with special needs is children with different characteristics in their emotional and mental than another child in their ages, so they need special education service (Murtie, 2014). Republic Indonesia Constitution No. 8 year 2006 explain that people with disability have equal opportunities in accessibility which covers all aspects of community and state administration.

SebelasMaret University is one of the campuses that called as inclusion campus in Indonesia. The statement is in line with (Dahroni, 2016) that SebelasMaret University is a university that has declared a inclusion university. There are some college students with special needs that run education in SebelasMaret University, so time by time SebelasMaret University make some facility betterment for college students with special needs such as in pedestrian lane. Pedestrian lane in SebelasMaret University is still need to be reviewed to fulfill 4 principles of accessibility.

This research aimed to evaluate the pedestrian lane in SebalasMaret University for pedestrian especially pedestrian with special needs. The focus of this research is referring to the pedestrian lane elements as trees/ shade plants, lamp, paving, rest area and direction sign (Sembor, dkk, 2016).

II. RESEARCH METHODOLOGY

This research was using qualitative-descriptive method with data collection through observation and documentation. This research object is pedestrian lane

in SebelasMaret University addressing in Jl. Ir. Sutami No 36 Jebres, Surakarta, Jawa Tengah.

The observation was using checklist based on accessibility principles of the Decree of Public Works Ministry Republic Indonesia No. 468/KPTS/1998 as convenience, usability, safety and independence. The data collected was analyzed with government regulation about accessibility especially pedestrian lane.

III. RESULT AND DISCUSSION

Based on the pedestrian lane observation result in SebelasMaret University, it can be found that the pedestrian lane was unqualified to the pedestrian lane requirement of Public Works Ministry Decree of Republic Indonesia No. 468/KPTS/1998. Here the discussion of pedestrian lane in SebelasMaret University reviewed with the Decree of Public Works Ministry of Republic Indonesia No. 468/KPTS/1998 based in pedestrian lane element.

A. The s



Figure 1. Pedestrian lane surface

The condition of pedestrian lane surface in SebelasMaret University is not suitable to the government's requirement. The government requirement confirmed that pedestrian surface width standard for 1 direction 130 cm and for 2 directions 160 cm. In addition, the standard for joints or bumps for the pedestrian lane surface is not more than 1.25 cm. Meanwhile, conditions at SebelasMaret University for 1-way pedestrian have a size of 120 cm. Meanwhile, the 2-way pedestrian path has a width of 140 cm and the height of the connection or mound is 1.25 cm. Thus, the width of the pedestrian route at SebelasMaret University has not met the standard size of the government. In addition, many trees, electric cables located in the middle of the pedestrian path would danger the pedestrians, especially children with special needs who use wheelchairs.

B. S



Figure 2. Safety edge of pedestrian lane

Safety edge is important as wheel and stick stop to the dangerous direction. The safety edge according to government requirement confirmed that have high standard of 10 cm and width standard of 15 cm along the pedestrian lane. Meanwhile, in SebelasMaret University the average of high and width of the pedestrian lane was 30cm and 9cm. Thus, the safety edge of pedestrian lane in SebelasMaret University was unqualified to the government regulation.

C. RAMP



Figure 3. RAMP

RAMP aimed as alternative for people that cannot use stairs. The standard determined by the government in RAM installation have the minimum width of 95cm without safety edge and 120cm with safety edge. RAMP must be illuminated with sufficient lighting. In addition, RAM must be equipped with a propagation handle. The RAMP condition in SebelasMaret University has a width with a security edge of 80 cm and there was no stretch handle and less lighting.

D. Rest Area



Figure 4. Rest Area

Rest area used to help the disable pedestrian. Pedestrian lane in SebelasMaret University there is still a minimum rest area and there is only in the bus stop.

E. Lighting



Figure 5. Less light edestrian lane

Lighting used as lighter along the pedestrian lane in the night. The lightning condition in pedestrian lane in SebelasMaret University was almost not exist.

F. Treatment



Figure 6. Treatment

Treatment needed to decrease the possibility of accident. The condition in SebelasMaret University, there was many pedestrian lane surfaces that broken already and many materials stacked in the middle of pedestrian lane.

G. Sign



Figure 7. There are no special sign

Sign is a facility used to give information, direction, marker or sign for pedestrian especially pedestrian with disability. The condition in SebelasMaret University, the signs was not qualified enough, for example is the absence of braille sign for blind person.

Below is the research result recapitulation of pedestrian lane in SebelasMaret University:

Table 1. Pedestrian Lane Conditions

No.	Pedestrian facilities	lane	Accesible/not accesible
1.	The size of pedestrian lane		Not Accesible
2.	Safety edge		Not Accesible
3.	Ramp		Not Accesible
4.	Rest area		Not Accesible
5.	Lighting		Not Accesible
6.	Treatment		Not Accesible
7.	Sign		Not Accesible

In addition to examined based on pedestrian path elements, there are review based on 4 accessibility principles as convenience, usability, safety and independence according to Decree of Public Works Ministry Republic Indonesia No. 468/KPTS/1998, there are:

A. Convenience



Figure 8. There is no path to the library

Convenience is where everyone can reach every public place or building in a society. Meanwhile, pedestrian lane in Sebelas Maret University have less access to the library and some places that not yet available with pedestrian lane.

B. Usability



Figure 9. There are no special sign

Usability is everybody should be able to use every place or building in a society. Pedestrian lane in SebelasMaret University was cannot be fully accessed by special need children yet, for the examples are; there is no any sign for blind people and there are some tress blocking the pedestrian lane.

C. Safe



Figure 10. Pedestrian Lane Conditions

Safety is every public building in a society have to pay attention to the everybody's safety. Pedestrian lane in SebelasMaret University was still harmful to the children with special need because the were still some high mounds / connections unsuitable with the standards set by the government.

D. Independence



Figure 11. Pedestrian Lane Conditions

Independence is everybody should be able to reach, enter, and use all of the public place or building in a society without other's help. The pedestrian lane in SebelasMaret University especially for children with special need with wheelchair was cannot accessed independently because the slope of RAMP was too high.

IV. CONCLUSION

Based on this study, it can be seen that the 7 element of pedestrian lane according to the Decree of Public Works Ministry of Republic Indonesia No. 468/KPTS/1998 show that pedestrian lane in SebelasMaret University seen from 4 principals of accessibility (convenient, usability, safety and independence) was inaccessible yet for all pedestrian lane users especially for children with special need.

This research result was expected to be as evaluation material for SebelasMaret University, so they can fulfill the rights of children with special need especially for the college students with disability in Sebelas Maret University.

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