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Characteristic of Student Informal Gathering Space (SIGS) Faculty of Engineering Hasanuddin University at Gowa Campus

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Abstract. The purpose of this study are: 1) What are the characteristics of Student Informal Gathering Room (SIGS) in the Faculty of Engineering, and 2) What attributes are felt by students in the Student Informal Gathering Room (SIGS). To get the results of the research purposed applied qualitative research methods with purposive sampling techniques. Data collection is done by distributing questionnaires to students, in-depth interviews and mapping behavior with place-centered maps. The results of the study is the closeness of the gathering place with the main activities of students in the teaching and learning process which is a characteristic of SIGS found on the campus of engineering faculty at Gowa campus. While the environmental attributes felt by engineering students at SIGS are accessibility, comfort, sociality, visibility, and activities.

1. Introduction

Student informal gathering space (SIGS) is a space provided on campus that is used by students as a place to conduct activities outside of lecture activities. The space is very important because it can be used to shape student characters such as organizational activities, student activity units and social place for students [1]. The room is a space that is outside of the classroom, such as corridors, inter-building corridors, parks, canteens, libraries, and so on. Many activities carried out by students at SIGS, such as waiting for lecturers, chatting, doing assignments, eating and drinking, sleeping, playing games, and others [2].

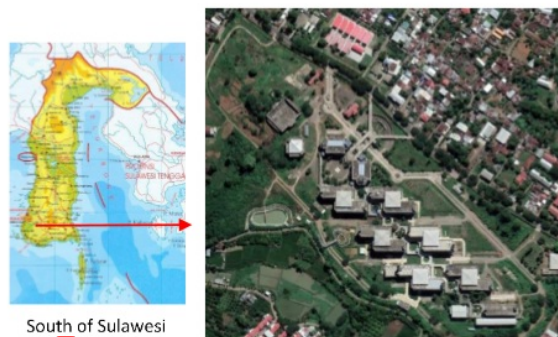


Figure 1. Location of campus of FoEHU

The Faculty of Engineering Hasanuddin University (FoEHU) is one of the faculties at Hasanuddin University which is located in the former of Gowa paper mill the KM 6 of Malino main road with an area of approximately 40 hectares (Figure 1). There are several buildings on the Gowa Engineering Campus, namely the Center of Technology (COT) Building, the Center of Science Activities (CSA), Classrooms (CR), AR buildings (Architecture and Regional and Urban Planning Department), Civil buildings (Civil Engineering and Environmental Engineering), Mechanical Building (Mechanical Engineering and Industrial Engineering), Electrical Building (Electrical Engineering and Information Engineering), Geological Building (Geological Engineering and Mining Engineering), Ship Building (Shipping Engineering, Shipping Engineering Systems, and Marine Engineering). Currently, additional campus facilities are being carried out, such as sports center and student center buildings which are still under construction.

The problem faced today with campus planning is the unavailability of public spaces or SIGS that can use by students as a gathering place to carry out various individual and social activities. There are 3 functions of campus, namely as an individual space as well as a public space for the exchange of information (scientific), a place to fulfill psychological needs (recreation) and biological functions (green open spaces) that are utilized by the academic community and the general public [3]. The SIGS must provide physical comfort, accessibility, and visibility [2]. In addition to the comfort in SIGS that students must feel, students must also feel some environmental attributes from the interaction process in a setting [4].

Initial observations showed that students in their spare time, they utilize the empty spaces around the buildings at Gowa campus as SIGS. The space like around the entrance of each building, a connecting corridor between buildings, corridor in the classrooms and hall in each building. The faculty built concrete chairs in the corner of the connecting corridor between buildings on the 1st floor, but not so many students gathered at the venue. The faculty also prepares concrete chairs in front of the CR and AR buildings, but it is not always used as a gathering place because it's hot by sunshine. The student gathering at the place when cool by the shadow of buildings and trees covering the area. The canteens between the buildings are also ineffective as a gathering space because it disrupts lecture activities and seems dirty [5]. Based on the problems above, the problem is: 1) What are the characteristics of SIGS in the Faculty of Engineering, and 2) What environmental attributes are students of Engineering faculty felt at the SIGS?.

2. Literature Review

Like public space [6, 7], SIGS is a space that can be accessed by all students. Research on behavior conducted by White in several public spaces in America, he noted several factors that influence the use of public space by people, namely: sitting space, sunlight, wind, vegetation and water, food, physical and direct visual access to the main road. Whereas the things that are not expected in public space are effective capacity, inner spaces, scale in small cities, and triangulation [8].

Based on its forming elements Rapoport explains that the settings can be distinguished namely [9]:

- 1) Fix components, which are basically fixed elements or changes that are rarely and slowly such as space, roads, pedestrians, and others.
- 2) Semi fix components, which are rather fixed elements, can change quite quickly and easily, such as trees, street furniture, street vendors.
- 3) Non-fix components, namely elements related to human behavior in using space.

The attributes that arise from interactions can be divided into 12 (twelve) namely [4]:

- Comfort is a state of the environment that provides a sense that is appropriate for the senses and anthropometrics accompanied by facilities that are appropriate to their activities. Anthropometrics are the proportions and dimensions of the human body as well as the physiological and ability characteristics associated with a variety of different human activities. Anthropometrics is also referred to as a human factor that dimensionally influences architectural design.

- Sociality is the level of a person's ability to carry out social relations in a setting. A level where humans can express themselves in the relationship of social behavior is directly related to the arrangement of seats and tables in a public space. The distance between individuals, non-verbal behavior such as body angle, eye contact, and facial expressions will indicate the quality of socialization.
- Visibility is the ability to see unobstructed visually on the intended object. Visibility is related to the distance felt by humans. But the perceived distance is not just a dimensional/geometric distance, but it involves a visual perception in which humans feel the presence or absence of obstacles to achieve the intended object.
- Accessibility is the ease of moving through and using the environment. The ease of movement in question is related to circulation (road) and visuals.
- Adaptability is the ability of the environment to be able to accommodate different behaviors that did not exist before.
- Sensory stimulation is the quality and intensity of stimulants as experiences experienced by the human senses.
- Control is the condition of an environment to create personality creates territory and limits a space.
- Activity is a feeling of intensity in behavior that continuously occurs in an environment.
- Crowdedness is a feeling of the level of density in an environment.
- Privacy is the ability to monitor the running of information that looks and sounds both from and in an environment. Privacy is the desire or tendency in a person to not be disturbed by his solitude.
- Meaning is the ability of an environment to present individual or cultural meanings to humans.
- Legibility is a convenience for someone to be able to recognize or understand key elements and relationships in an environment that causes the person to find a way or direction.

3. Method

This study applies qualitative research methods with a purposive sampling technique. The qualitative methods as a research procedure produce descriptive data in the form of written and oral words of people and their behavior observed [10-12]. The people referred to in this study are students of the Faculty of Engineering who carry out activities at SIGS on the Faculty of Engineering Gowa campus and beyond. Data collection is done by distributing questionnaires to students, in-depth interviews, and conducting behavior mapping.

4. Result and Discussion

FoEHU has not been planning space for public spaces used by students as SIGS, only spaces such as amphitheater which are located between the COT and CR buildings and empty spaces between the buildings. The empty space is then used as a canteen equipped with chairs and tables made of concrete. The parks in the electro and shipping buildings are not yet equipped with chairs and tables so the canteen manager prepares tents and temporary furniture. The design of the campus landscape is done by building a green open space located in front of the campus, but no students use for gathering place because it is hot and not maintained. There is concrete benches in the corner of the corridor on the 1st floor but fewer students gather because the space always hot by sunshine. Faculty and each department provided several sitting space like bench and student use as SIGS (Figure 2).



Figure 2. SIGS at the FoEHU

Based on the questionnaire, classrooms and laboratory buildings are places that are widely used for gathering places either before lectures (62%) or while waiting for the next lecture (33%). Students are in SIGS both before studying (33%), the time between lecture one to the next lecture (29%), and after lecture takes place before back to their homes (23%). SIGS are used for activities in these three places around the building entrance, indoor corridors, and canteen in front of the CR building or department/laboratory building. The choice of SIGS is because it is close to the classrooms and laboratories, making it easier for them when college starts. If they have time, they can go to the library or to their friend's boarding house located in front of the campus. Not so many students use SIGS after the lecture because many students go back home soon (60%) (Figure 3).

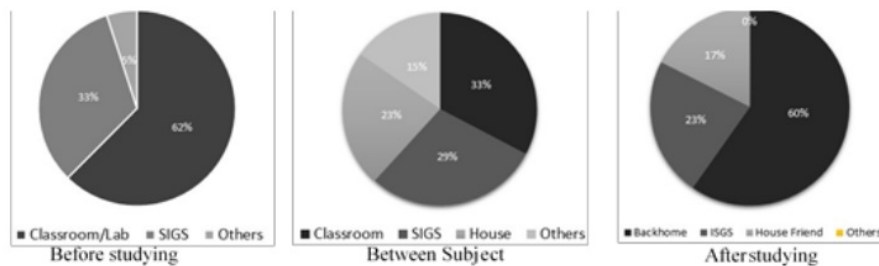


Figure 3. Time and place at the SIGS

The most commonly SIGS used by students are the department/laboratory building, CR building and park (canteen) and the corridor between the department buildings. The CSA building with some facilities like a library, computer center, display room, and around the entrance of the building becomes SIGS. As well as around the COT entrance and hall at 1st floor are often used by students as a gathering place. The corridor which is located around the amphitheater also becomes the SIGS for students before moving to the CR building (Figure 4).

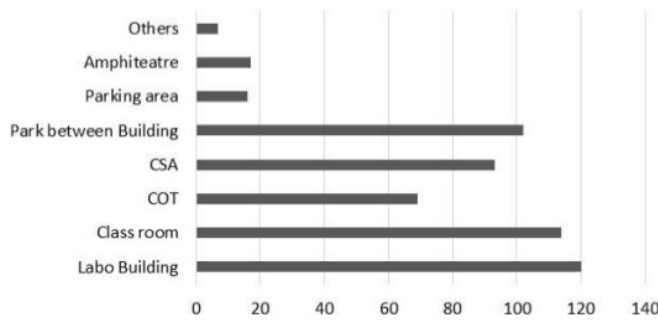


Figure 4. SIGS Commonly used by students

Some considerations of students choosing SIGS around it are the availability of chairs in classrooms, sitting space like concrete benches around the canteen and flower pots located along the ground floor corridors and around the building entrance. The availability of sitting space, protected from the sunshine, and feel the wind blows are the reason students in the SIGS. SIGS is a social space because many students always gather, which is the reason the student choose the space for gathering space. Space around the entrance of buildings, corridors in buildings are space where students can see the arrival of their lecturers and friends. Classrooms in the CR Building, libraries and showcase rooms at CSA have air conditioning, so students feel comfortable at the SIGS because they feel comfortable with the AC. Besides close to CR Building, library at CSA Building also students can study quietly without feeling disturbed by others. WIFI available in every building provides convenience for students to access information and lecture material. Boarding houses around the campus also become SIGS for students when waiting for college or after (Figure 5).

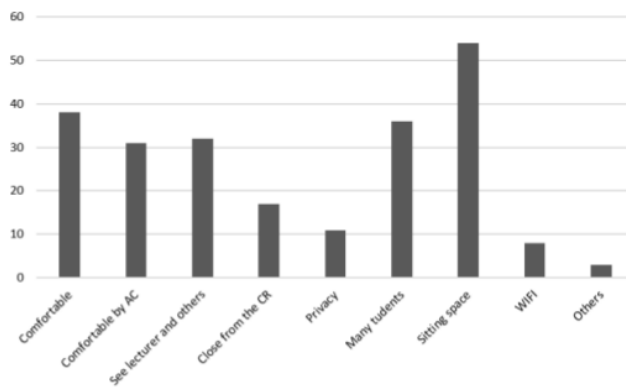


Figure 5. Reason to choose SIGS

The main activity carried out by students at SIGS is chatting with one another. In addition, many of them study and do assignments while searching for references on the internet. Eating and drinking are activities carried out by students in SIGS while waiting for the lectures in the classroom, in the canteen or in the resting time in the afternoon. Playing games by android or laptop during break time or waiting for the next lesson is also done by students at SIGS. Students also sleep in SIGS during break time, generally done in the student room or at the house/boarding house located around the campus. Other activities are just sitting without doing any activities or just looking at other student activities (Figure 6).

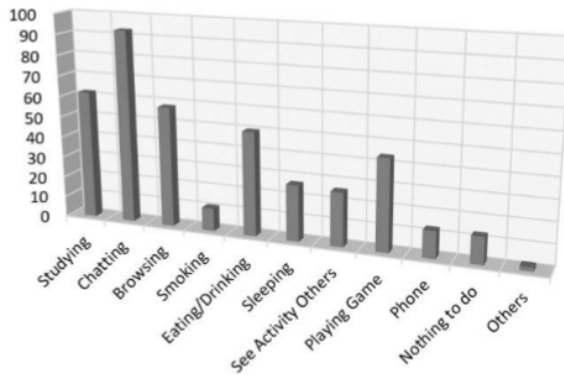


Figure 6. Activity on SIGS

5. Discussion

The main activity of students on campus is learning carried out in the classrooms (CR) and in the laboratory each department, so that moment is a great opportunity for students to meet in the building either before lecture or time between lecture. Because often used as a gathering place while carrying out various activities, the classroom has two functions, namely as a formal space for learning and informal space as SIGS. Students use classrooms as SIGS because these spaces provide several attributes to students [4].

Based on the favorite space used by students as SIGS according to Figure 3 above, the distribution of students on the Engineering campus is shown in figure 7. All students of each department use the space around their laboratory buildings, such as halls, entrances, and student rooms as SIGS. Outside the lecture hours, students use the space around the CR building, such as the corridor in the building, hall, around the entrance, and the corridor of the building as SIGS. They use the space as SIGS because they get the attribute of accessibility to CR building and laboratory building. The comfort attribute is felt by students by having a sitting space in the classroom, a wooden benches in the hall, and flowerpot wall along the corridor, and sitting on the floor. The comfort attribute is also felt with the presence of AC and protected from the sunshine. The SIGS gives an attribute of visibility to students to see the arrival of lecturers and other students. When students meet, they have a conversation and this scene make an attribute of sociality.

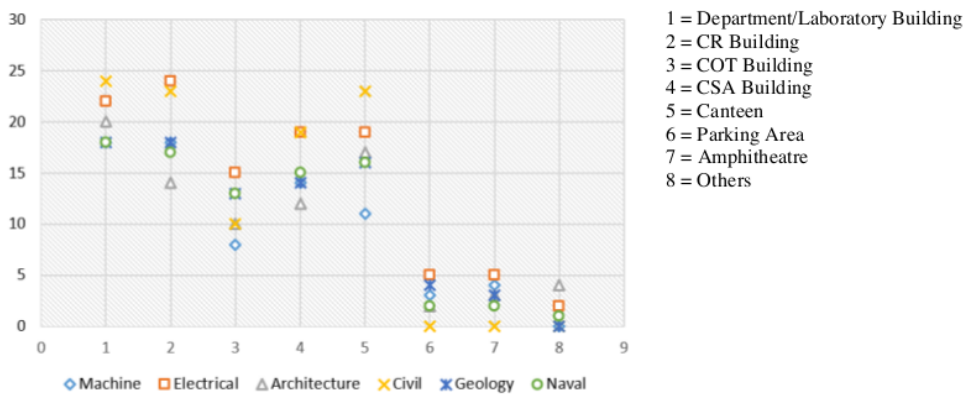


Figure 7. Distribution of students on SIGS

The space between buildings used as canteen is also used by students of all departments as SIGS, although not all canteens have permanent facilities such as roofs and furniture. Students get quick accessibility to the laboratory it is located between the laboratory buildings and located close to the entrance of the building. Students also get the visibility attribute, which is that they can easily see the lecturers and their friends because no prevent their view. Various kinds of activities can be carried out by students in the canteen, so students get the attributes of activities.

Rooms in the CSA building such as the library room, showcase room, and space in front of the elevator are the SIGS that is used by all students of the Engineering faculty to carry out various activities. In addition to getting the attribute of comfort because air-conditioned, students also get the privacy attribute in the absence of interference either sound disturbance or interference from other student activities. Besides being located in CSA which is located in the CR building, students get the attribute of accessibility. This room also has a chair that provides attributes of comfort in studying in accordance with the anthropometrics of the student body

Sitting space is one of the successes and gives life in public space [8] and there is no reason for people to be in public space except without a seat [13]. This is the main reason for students to be in SIGS, both chairs in the classroom, sitting space in the hall of the CR building and the laboratories of each department, concrete chairs in the canteen, and retaining walls in the ground of the plant's corridor, even student sitting on the floor. The sitting space consists of 2 categories, namely primary seating in the form of a bench or chair and secondary seating in the form of a place where informally and spontaneously can rest while doing other activities [13, 14]. The sitting space provides student attributes of comfort (Figure 8).



Figure 8. Sitting space on SIGS

Conversation is a social activity as part of 3 types of outdoor activities that can occur at any time in public spaces [13, 15]. This is also done when students meet at RBIM while waiting for the lecturer, the main activity carried out is conversation. The conversation resulted in social attributes that were felt by students.

5 Conclusion

Based on the discussion and discussion above, it can be concluded as follows:

- 1) The closeness of the gathering place to the main activities of students in the teaching and learning process is a characteristic of SIGS found on the Engineering faculty at Gowa campus. The CR building as a place for students study, the laboratory building as a lecturer room, the administration room and the student practice room are the room for main students' activity, so there are many SIGS found in the building. The canteen which is located between the buildings is also the SIGS which is often used by students because it is close to the CR building and laboratory. The library and showcase room located in the CSA building are SIGS because they are located close to the CR building which makes it easy for students to go back to the classroom.
- 2) As a product of perception of the environment, the attributes perceived by students are accessibility, comfort, sociality, visibility, and activities.

Acknowledgments

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