(REVIEW ARTICLE)

Communication hazard in educational institutions pt. Maritime education and logistics Indonesia

Biutifa Fisisa Prawira [*], Denny Nurkertamanda, Ary Arvianto and Manik Mahachandra

Department of Management and Industrial Engineering, Faculty of Engineering, Diponegoro University, Semarang, Indonesia.

Abstract

Completeness of information in public areas such as offices is very important, considering that these areas are visited by many people from various backgrounds. With this information board, it will make it easier for them to find the intended building area. However, if there is none then it will be difficult for them. Both in office buildings and in PT. In PMLI, there are still many incompleteness, so some improvements are needed, as the author said. And even though there is already a hint of information displayed, the color choices shown are still not clear. Still need to improve the background color to make it easier for visitors to see and read.

Keywords: Communication Hazard; Information Displayed; Background Color; Lack of Information;Visibility

1. Introduction

Environmental conditions in the office greatly affect angle people's point of view/impression from the first sight. The more complete the information displayed in the public environment around the office, many people will find it helpful without having to ask employees in the office if they want to travel or find the intended location.

Supplementing information around the office area is very necessary in this day and age that is fully mobile and full of information openness wherever it is. However, we also need to pay attention to the selection of colors, writing, fonts, backgrounds, direction of light and others. so that the information board can function properly. Do not let the information board have no function or benefit and only become a mere display.

In this case, not only general information can be displayed. However, safety information is also equally important to consider the layout so that its function can be maximized. Because the possibility of safe escape is one of the most important aspects of building safety. Clear instructions regarding the location of exits are necessary to facilitate evacuation during an indoor emergency. As a matter of fact, navigation aids are more effective and efficient to use than area maps.

Apart from the placement that needs to be considered, there are also several other factors such as: signage design and size, color, text size, font, boarder, *luminance*, and visibility. This will affect the interest of road users when reading it. Conversely, if the information board is poorly designed and visually unattractive, the information on it cannot be conveyed clearly.

In the educational environment of PT Maritime Education and Logistics Indonesia, the completeness of information in various locations is very necessary, this is based on the fact that visitors who come to the environment come from

[*] Corresponding author: Biutifa Fisisa

various regions and are not native people around the location. Thus, open information is needed so that everyone in this educational environment can exchange information and can find the intended location independently.

Therefore, the purpose of this study is to identify the availability of public information, identify information deficiencies in the educational environment of PT Pendidikan Maritim dan Logistik Indonesia and suggest suitable examples of continuous improvement to be implemented.

2. Research methods

2.1. Time and place

This research was conducted in December 2022 located in the learning and office building of PT Maritime Education and Logistics Indonesia (Ciawi, Bogor Regency).

2.2. Primary data

The forms of primary data used in this research are interviews and direct observation. Where, the interview was conducted by conducting a question and answer session with several employees around the learning and office building area.

2.3. Secondary Data

The use of secondary data in this study, researchers used related journals about *communication hazards* in several public areas such as schools, public areas, offices, and others.

3. Results

3.1. Research Flow

In this research, the flow of research carried out is starting with observation, then collecting data and information and trying to suggest improvements.

4. Discussion

4.1. Learning Building

At PT Education and Maritime Logistics Indonesia (PMLI) there are 2 (two) important areas that are the center of the work business. The first is of course the learning building and the second is office area. Where, this learning building consists of several classes, public facilities such as These include: library, musholla, function room, toilets and so on. The images below are some snapshots of the learning building.

Figure 1 Front View of the Learning Building

As mentioned above, inside the learning building there are classrooms that are usually used for daily learning class. Due to the large number of classes, this learning building is divided into 2 (two) sides, the upper side that we called as 3rd floor rooms and the lower side consist of 2nd, 3rd, 4th floor and roof top facility. At first glance, it appears that the name of the building is quite clearly visible from the front because it has a dark background and light-colored font.

Meanwhile, on the lobby or entrance side of the upper learning building at 3rd floor, it appears that there is a lack of

information as shown below.

Figure 2 Lobby of Learning Building at 3ʳᵈ Floor

From the photo above, it appears that there is no information available to the reader other than a large sign at the back that reads 'Be a Teacher and Be a Student', a map with directions and a flyer with information about the center's facilities. If one were to walk into the building for the first time and try to find their way to a particular room, one would definitely be confused as to where to go, whether left, straight or right.

In fact, the face of an office should be a reflection of what the environment in the office is like. If there is no *security* officer like the picture above, it is certain that anyone will become confused and lose their way. Which, there should be a direction board in front of the entrance to any direction to a particular room.

Instead of writing such a large writing that does have the benefit of encouraging the participants, it is better to print on the wall an information about the direction of a room, for example to the left it goes in which direction and to the right it goes to what room. This is the reason why information writing is very effective when placed there, because its position is parallel to the entrance and if the font size of the information is the same as the current font, it will be more effective. Then it can be read and seen clearly even if it is read from this far away.

In fact, behind the words 'Be a teacher and be a student', there is a toilet that is not visible from the front. So that no one knows that behind the writing is a toilet. Which, toilets are public facilities that should be informed to the public. It would be better if in addition to the large writing, a picture of a toilet or toilet acrylic was also installed.

Figure 3 Lobby of the Upper Side Learning Building

Behind the picture number 2 of inside area 3ʳᵈ floor Lobby, is the picture of lobby number 3 which showed up the outdoor area of the lobby. Where when viewed from this point of view, there is no visible information pole regarding the direction out of the neighbourhood `whether the direction is to the right or to the left. Whereas generally, usually an exit direction information pole will be installed to facilitate visitors.

While there are no exit signs, the lobby can be given information boards on the locations of other classes. Instead of leaving the area empty, it would be better if we utilize it so that anyone who loses their way can find the intended location by using the signboard.

Figure 4 Smoking Area

Behind picture 3, is the *smoking area* or in Indonesian known as the smoking area. The information label posted to explain to visitors that the area is a smoking area is just a print-out using ordinary paper as shown in the photo above. It would be more beautiful to see, if we replace the writing using acrylic boards that are sold freely, to make it more *eye catching* so that visitors can understand it at the beginning of arrival to the place. Or as an alternative, perhaps a smoking picture or an ashtray near the seating area can also be given an information pole. We can adds some persuade words to encourage the visitor to maintain cleanliness of the area.

Figure 5 Motorcycle Parking Area of Learning Building

Opposite the smoking area in the previous picture, there is a motorcycle-only parking area as shown in the picture above. If we look at it from the perspective of the photo, it does not appear to be there is an information pole indicating that the area is a motorcycle parking area. It would be better if information poles with motorcycle symbols were added to make it easier for visitors riding motorcycles to find the parking area and convincing the public visitor that those area can be parked for the anyone motorcycles not specifically for employees.

Finally, we will discuss the entrance to this building. Where, there are 2 (two) accesses available, namely through stairs and *ramps* for people with disabilities as shown in Figure 6 below.

Figure 6 Access to the Learning Building (Stairs and Ramp)

It can be seen in the picture that the two access paths have no downward or upward walking directions, and there is no anti-slip installed on them. It would be better if there were directions installed, i.e. on the left side of the stairs there is a downward arrow and on the right side of the stairs there is an upward arrow.

After discussing the availability of information in the front area of the learning building, it's time for us to enter the main area of this building, the classroom area. Where in the building there are several classes, both small and large classes. Here is a complete discussion about these classes.

Figure 7 Classrooms

At each classroom door, it is equipped with a class name board and the name of the activity. This serves to make it easier for participants to find the classroom and also at the same time inform anyone passing by that there is even learning taking place with certain courses in the classroom as shown in the picture below.

Figure 8 Classroom Labels

When viewed from Figure 7, the name tags installed in each classroom are only attached to the side of the door. And if seen from the point of view of the hallway, it is not visible. It would be better if a neon box is also installed in each class that can be seen from the hallway. So that trainees who want to enter looking for their class can find the intended class from the end of the entrance. If there is no neon box, the trainees will have to search one by one at each class door. Around the classrooms, there are also other facilities such as *cafeterias,* toilets, prayer rooms, and so on. The rooms are divided into several floors as shown below.

Figure 9 Directions to Other Areas in the Learning Building

Actually, the directions in the picture 9 is quite informative and clearly legible. However, it can only be read if we are on the stairs. It would be better if the hallway also had a room direction sign like the one in Figure 9 so that participants who were walking and looking for room information could find it before reaching the stairs. We can also add some of the additional information that promote about PMLI in every corner of the classroom.

Figure 10 Learning Building Staircase Area

As in Figure 9, Figure 10 also shows information instructions on the direction of other rooms needed. According to the author, in terms of color selection, the information can already be read clearly. However, the same input, according to the author, also needs to be added at other points besides the staircase area. So that visitors or participants who are around the area can find the intended direction outside of the stairs.

Figure 11 Learning Building Hallway

In the image above, it can be seen that there are already hanging information clues as the author tries to suggest on previous pictures. However, in the author's opinion, the sign is not even visible from the main road. Given that it is located very high from the ground floor and the background color displayed is very inconspicuous, it tends to be ignored. It would be better if the color highlighted is a bright base color such as: white, yellow, or maybe orange and with a wider box size and larger font.

Figure 12 Front Lobby of Learning Building

Behind image 11 is an image 12 which in terms of its shape is the lobby of a building. However, there is no information clearly enough to explain what part of the office is on the 2nd floor. So that participants and visitors must climb the stairs first to find the intended area. It would be better, if in front of the staircase area, there is a signboard regarding information on what rooms are on the floor or any information.

4.2. Office Building

After discussing in sufficient detail, what information the author feels is lacking in the Learning Building, now we will enter into the results of the discussion regarding the completeness of information in the Office Building, which is located opposite the Learning Building. with learning building.

Figure 13 Office Area

In the office building shown in Figure 13, it can be seen that this type of room is fully air-conditioned. So there are no windows for air exchange from inside and outside. When viewed from here, there does not appear to be any information about each room here. So it will make it difficult for first-time visitors to find which table or room. It would be better if information about the name of the person who occupies the desk or room and also the field of work could be displayed to make it easier for anyone to find this information. Or to make it simple, we can make the name of the area with the name of Division.
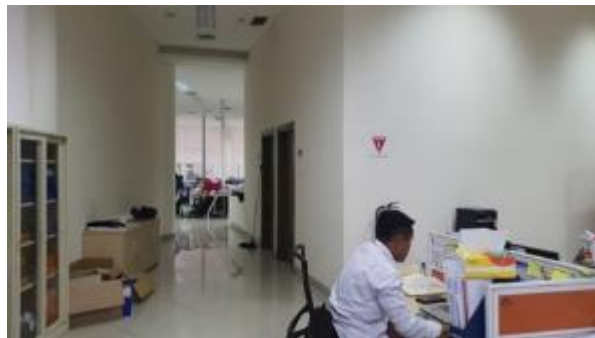

Figure 14 Office Area on the Other Side

Figure 15 Side of the Stairs to the Exit

Not only a table or information board, an exit sign is also needed. This can be used as a direction to get out of the work environment area. Or used to direct old or new employees in the event of a disaster, be it natural or otherwise, to

immediately run and find the way out.

The end of the path from figure 13 is figure 15, which is the staircase leading to the exit. From here, there is also no sign of safety information about the exit route for employees, even though there are a lot of people in this building. It would be very dangerous if someone visited this building and did not understand the exit directions because there was no information installed inside.
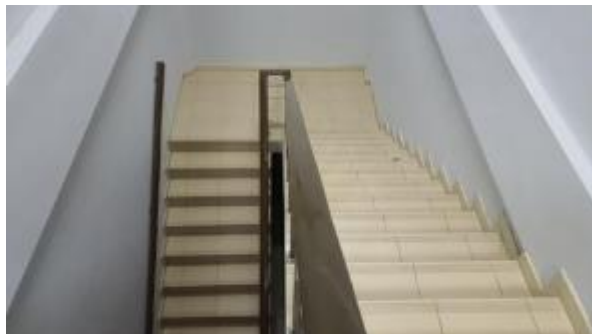

Figure 16 Office Building Stairs

The stairs to the exit in this office building also do not have clarity between the up and down directions. And there is no anti-slip on each step, it would be better if anti-slip is installed on each step for safety reasons for the employees.
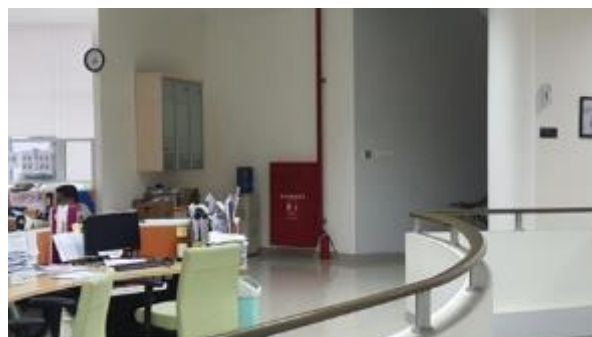

Figure 17 Other Office Side

Finally, I would like to discuss the other side of the office building. Because this building happens to be curved, there will be another side of the building that looks like the picture above. Here, too, there are no information signs about the exit routes for the employees. This is the same as the shape in Figure 14 and it is even darker than Figure 15. It would be better if directions were installed. Exit and the addition of lights for illumination.

5. Conclusion

From the results of Communication Hazard in Educational Institutions PT. Maritime Education and Logistics Indonesia, it showa there are still many incompleteness, so some improvements are needed, as the author said. And even though there is already a hint of information displayed, the color choices shown are still not clear. Still need to improve the background color to make it easier for visitors to see and read.

Compliance with ethical standards

Disclosure of Conflict of interest

No conflict of interest is to be disclosed.

References

[1] Appel-Meulenbroek, R., Kemperman, A., van de Water, A., Weijs-Perrée, M., & Verhaegh, J. (2022). How to attract employees back to the office? A stated choice study on hybrid working preferences. Journal of Environmental Psychology, 81 (December 2021). https://doi.org/10.1016/j.jenvp.2022.10 1784

[2] Fu, M., & Liu, R. (2020). An approach of checking an exit sign system based on navigation graph networks. Advanced Engineering Informatics, 46(July). https://doi.org/10.1016/j.aei.2020.1011 68

[3] Kompier, M. E., Smolders, K. C. H. J., Kramer, R. P., van Marken Lichtenbelt, W. D., & de Kort, Y. A. W. (2022). Contrasting dynamic light scenarios in an operational office: Effects on visual experience, alertness, cognitive performance, and sleep. Building and Environment, 212 (November 2021), 108844. https://doi.org/10.1016/j.buildenv.2022. 108844

[4] Lin, Y., Zeng, W., Ye, Y., & Qu, H. (2022). Saliency-aware color harmony models for outdoor signboards. Computers and Graphics (Pergamon), 105, 25-35. https://doi.org/10.1016/j.cag.2022.04.01 2

[5] Zhang, Z., Qin, Y., & Jia, L. (2022). Discrete modeling approach for emergency guidance signage system design in underground spaces: A case study in transportation hubs. Tunneling and Underground Space Technology, 120 (November 2021), 104275. https://doi.org/10.1016/j.tust.2021.1042 75