

Conference Paper

The Role of Instructional Design for COVID-19 Quarantine Patients in Semarang

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ORCID:*Agustinus Dicky Prastomo*: <http://orcid.org/0000-0001-5173-5662>**Abstract**

In 2020, COVID-19 spread around the world, negatively impacting patients, medical teams and volunteers, causing death, and paralyzing the social economy. The purpose of this research was to describe the role of instructional design by our visual communication design department. This department created supportive social community programs to help patients, the medical team and the volunteers. This supportive program was given to a group of patients in June-July 2020 who were quarantined and monitored by the medical team and volunteers in the Semarang Mayor's Office, Central Java, Indonesia. The designer created a distance between the medical team and volunteers and the patients through online communication technology. Offline activities that brought joy and pleasure included making fruit salad step by step. By following the tutorials, these activities could benefit others and support medical teams who work in the field in high-risk situations with strict health protocols.

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1. Introduction

The health sector is the most important things today in life activities that attract attention in the Capital of Central Java, Semarang. The government, medical team, and the volunteers need to anticipate and prevent the spread of the COVID-19 pandemic. Based on the social and economic impacts, various kinds of activities are required to support common health programs. Healthy people are always encouraged to help preventing the spread of the COVID-19 through various healthy campaigns such as a healthy lifestyle, nutritious food, adequate rest, sport exercise, washing hands with soap, and implementing health protocols.

The most suggested health protocols during this global pandemic include the use of masks when outdoors, maintaining distance, and doing more activities at home

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like WFH-Works from Home. The environmental atmosphere looks like alert zone with several situations where offices and many other public places carry out temperature checks, heart rates, and blood oxygen saturation monitoring. The school also carries out distance learning activities. These health suggestions are complete state of physical, mental and social interactions. This condition is certainly positive and needs to be supported by citizens.

However, it should be noted that among the citizens, the suspected cases and asymptomatic patients with COVID-19 will certainly require special treatment. Apart from the medical treatment and assistance, they are also in a low level of psychosocial and economic condition. The consequences of this condition is that it will create new problems, especially the social and psychological impact of COVID-19 pandemic, such as persistently elevated blood pressure, anxiety, quarantine sleep paralysis, social economic pressure, mental illness, experiencing loneliness or low self-esteem. Social intervention is critical needed for those, who were quarantined in the Mayor's Office House of Semarang, Central Java. One of the efforts to contribute the social interventions is by providing a community service program. The suspected cases and asymptomatic patients will be able to get involved in various recreational activities.

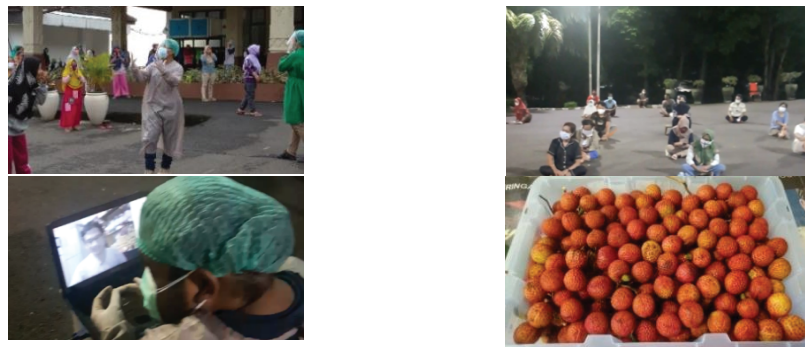


Figure 1: photo documentation for preparing the events

In order to solve the problems, a social construction strategy must be created. It safe and useful to bridge this problem while maintaining the health protocols. The challenge is clear, what can visual communication designer do for helping? Therefore, this paper intends to map and describe the social construction strategy based on the idea of using instructional design through visual communication multimedia (video) that provides tutorials on recreational activities.

Designer is not like an artist instead of devoting himself solely to problems that attract attention to themselves, a designer is obliged to construct his social environment with good values. The current situation of this idea is relevant to the opinion of design experts Lawson, that a designer will be responsible for sending good messages to

their public environment [1]. Although the suspected cases and asymptomatic patients at the Semarang Mayor's Quarantine House are not allowed yet to contact outsider, the designer was suggested to communicate through online technology.

As Lawson noted, sending good messages is a part of design for everyday life. When it comes to talk about the field, visual communication designer could create tutorial video in terms of health protocols information or instructional content easily accessible and understandable for the medical team, volunteer team and patients. To support safe social interaction with instructional design media, the visual communication designer will be able to achieve optimal potential degree of effectiveness by sending step by step information instructionally. Thus, instructional design plays an important role and aims to support recreational activities for quarantined patients at the Semarang Mayor's Office. Recreational activities in some ways could improve the mental immunity of the patients, so that they will be happy and recover quickly.

2. Method

The reflection of Victor Papanek in his classic work *Design for Life*, reveals a fundamental question that is still relevant today in the design process. Is it enough for a visual communication designer to simply have the knowledge and skills to beautify or improve? At the end of his reflection, the best answer is that a visual communication designer must also pay attention to the design functions he is designed for [2]. As suggested by Frascara [3], the function of using visual communication design instructionally is beyond information, identification, persuasion, education, administration, or exhibition. In the complex social problems, visual communication designer will be able to provide instructions or directions. While medical team, the volunteer, and the patient could figure out and get involved to the instructional design. The use of instructional design multiplies the impact of the information flow and change social behaviour.

According to Vygostky (in Duffy & Cunningham), an individual is only able to understand an instruction in a social context with others in sufficient social interaction [4]. This social interaction involves the instructor and participants collaboratively carrying out the process together and achieving optimal understanding. Vygotsky proposed 4 stages primary process when using instructional design:

1. Preparing creative content before delivered briefly
2. Demonstrating ethical behaviour environment that optimize instructional and time for doing

3. Increasing participant engagement by formulating action plan for improvement
4. Managing and supervising instructional programs

To paraphrase Vygotsky, cognition construction only happened through social interaction and instructor is a partner to achieve optimum result.

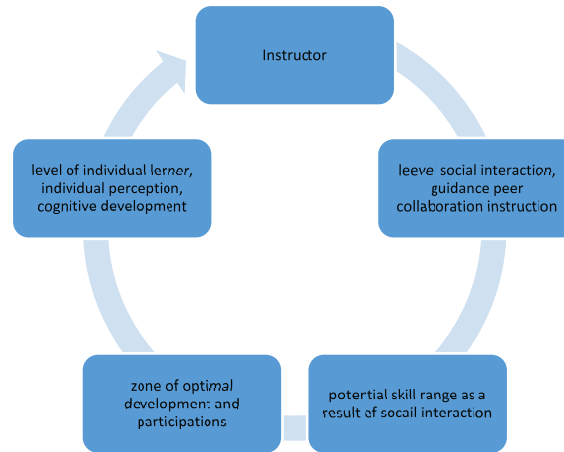


Figure 2: Stages of instructional process, adapted from Vygotsky (1996)

In Figure 2, the message created by the visual communication designer is prepared in multimedia language containing activity instructions before being conveyed to the patients.

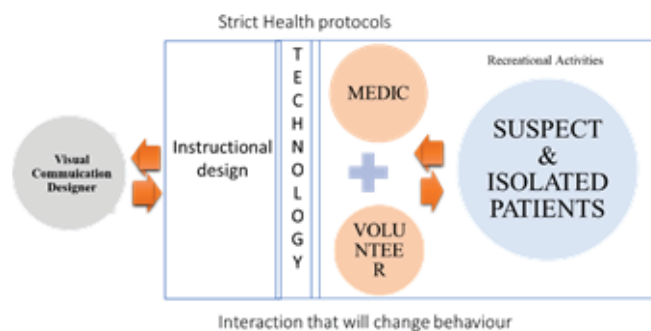


Figure 3: Social interaction model, adapted from Vygotsky (1996)

3. Result and Discussions

The existence of a quarantine facility in Semarang using the Mayor’s Office provides opportunities for medical personnel, volunteers and third parties to support each other for patients. The decline of internal self-motivation and enthusiasm occurred for 14 days quarantine time. Here, the mind is primary cause of illness. If the patients change their thought in their mind, probably they can change their perception about being

health. Mental health issues also arise related COVID-19 pandemic when they have to be quarantined in a remote area. Concerning a remote location conditions, a visual communication medium is required, equipped with messages, supported with online technology and instructed by the visual communication designer directly and indirectly.

During a pandemic conditions, a visual communication designer often gets practical questions. Where is a designer in this pandemic situation? What can be done? There are possibilities for the visual communication designer not only teaching, conducting design research, but also doing community services. Doing community services have a direct beneficial impact for the large target audience. Especially during this COVID-19 pandemic, variants of problems related to the Covid9 pandemic become abundant. One of the problem solver agents is visual communication designers. They will be focusing on certain problems such as designing an entertaining instructional design for a better and useful life.

What exactly is meant by instructional design? According to the notes of several experts (Papanek, 1973; Cunningham, 1996; Frascara, 2004; Hezkett, 2005) studies on the instructional design revealed that the primary elements include:

1. The way we think about design by showing how integral it is to our daily lives.
2. The reflection of design in our daily lives is functional and aesthetically pleasing.
3. The function of instructional design is needed more than just ordinary information or identification.
4. Multiple approaches, stages and strategies to conduct participation and social construction.

In this sharing, an instructional design is made through tutorial video to entertain and provide positive activities step by step for the patients' need safely. The role of instructional design with joy and happiness support recreational activities avoiding anxiety, bad emotion, negative thinking and depression.

Based on the user need, as shown in Figure 3 with COVID-19 pandemic conditions and situations, an instructional design with user oriented is needed. The quarantined patients need something else but medicine. Through the help of online-connected technology, a step-by-step video tutorial can be designed to instruct patients in a fun and entertaining way as followed in picture 2 and 3. The short video duration (2'30" length) is quite enough to deliver and making engagement and social interaction.

Social interaction is the centre of a communication process involving cognitive, affective and behavioural aspects. In the old perspective, the communication process is merely transmitting messages and receiving messages. To underline Josephson's

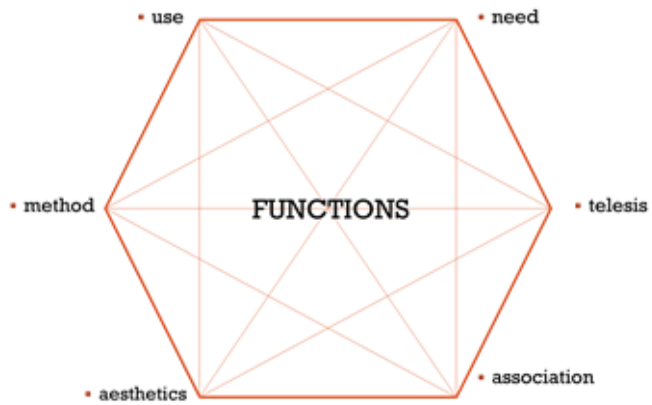


Figure 4: Basic function of design, adapted from Papanek (1973)



Figure 5: Video contact print, fruits salad tutorial activities



Figure 6: On the spot video contact print, small and large group activities

note, that he mentioned a research that was carried out in the early 19th century

(1983) regarding the social interaction between humans and internet design products involving “visual tracking” or eye tracking of multimedia (video): text, images, and sound in particular composition (elements and design principles) and layout of a visual display [5].

4. Conclusions and Suggestions

The designer could create a distance between the medical team, volunteers, and the patients through online communication technology. The instructional design could bring blessings to others with joy and happiness by following the tutorials and support medical teams who work in the field who are working at high risk with strict health protocols. Answering the hypothesis above, what we believe is to create our life on the inside and the outside. There is negative thinking and it is called negative effect. The same power that positive thinking can heal us negative thinking can kill us. The positive effect is when we have a very positive thought that something can heal us. It was the thought that healed us. So, if we were growing up and programmed with stronger, we would be more powerful than we are now. Based on these template programs we could create more and more instructional design in other places like in the small villages and so on.

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