Eduvest –Journal of Universal Studies
Volume 2 Number 8, August, 2022
p-ISSN 2775-3735-e-ISSN 2775-3727

IMPLEMENTATION OF DESIGN THINKING METHOD IN VISUAL COMMUNICATION DESIGN

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ABSTRACT

Design methodology is an important knowledge for student designers when doing design. However, in application in the design studio class, student designers often override this methodological aspect. This happens without realizing that students always have difficulty when asked to explain their work plans and the progress of their design work. With the methodology, student designers can more easily parse their work steps and convey their thinking ideas in a design concept when design drafting, especially visual communication designs (VCD). This journal aims to be able to describe the implementation of design methods in design drafting (VCD) so that it can describe logical and systematic thinking processes and work processes. Student designers can be able to apply and carry out correctly and present design drafting (VCD) in a responsible and professional manner so that it becomes an experience for them when they enter the world of work. With the theory of design methods and design thinking methods, the author reviews the application of design methods carried out at the two universities collaborating in this research project, namely Mercu Buana University and Pelita Harapan University. This research found the importance of methodological aspects in building motivation & design logic, the need to rearrange the curriculum structure according to the taxonomy of undergraduate education, the stages of work on the design report that are not in accordance with the work process in the design method used, and find the design thinking formula that is applied on the visual communication designs.

How to cite: Novena Ulita, Brian Alvin Hananto. (2022). Implementation of Design Thinking Method in Visual Communication Design. Journal Eduvest. *Vol 2*(8): 1.458-1.468
E-ISSN: 2775-3727
Published by: https://greenpublisher.id/

KEYWORDS | Student Designers, Design Methodologies, Thought Processes, Work Processes, Visual Communication Design (VCD), Design Thinking

INTRODUCTION

The curriculum in design education serves as the lifeblood of a design learning program so that its existence requires planning, implementation in a dynamic evaluation in accordance with the times, the needs of Science, Technology and the Arts as well as the competencies needed by the community, as well as users of university graduates. This is also supported by the issuance of Presidential Regulation Number 8 of 2012 concerning the Indonesian National Qualifications Framework and Law Number 12 of 2012 which encourage or direct all universities to be able to adapt to these provisions as a form of quality human resources (HR) who have a level of qualification of the level of ability hereinafter referred to as the formulation of learning outcomes. Thus, the IQF is an indicator for measuring university graduates who are equal and standardized according to the level of each level of higher education (Junaidi, 2020). Based on the guidelines for curriculum preparation, undergraduate graduates are different from advocacy graduates. The purpose of undergraduate education is to prioritize the application of scientific disciplines, so the curriculum carried out by undergraduate graduates is more theoretical by 60% than practical which is only 40%. Thus, undergraduate graduates actually become scientists who have a responsibility in developing the scientific discipline itself, which is not only pragmatic and materialist. Of course, this is an important part of the direction of developing the curriculum in the future, especially in the discipline of Visual Communication Design (VCD).

Visual Communication Design (VCD) graduates should not only be proficient and have practical competence in terms of design design, but also must be able to have critical and creative abilities that are useful in the development of these disciplines. Thus, the critical and creative thinking process becomes an important part that needs to be mastered by design graduates who are different from advocacy graduates. The responsibilities of undergraduate graduates play an important role in the development of the scientific discipline itself as experts while advocating as technicians.

This is what actually becomes the basis of this research, that it reminds us of the purpose of undergraduate education who has the responsibility as an expert in developing the discipline itself. So, graduates of Visual Communication Design should not only have abilities that are pragmatic in nature but must be strengthened by theoretical things in order to develop the discipline of Visual Communication Design which continues to develop following the trends of the times. This situation can be seen from the competence of Visual Communication Design graduates who currently tend to be more pragmatic and begin to forget the practice of thinking processes, even though in the world of work or industry they will be in need of such thinking skills rather than practical skills. The ability to think obtained or formed from the theoretical material provided in the curriculum by 60% becomes the capital of Visual Communication Design graduates in reviewing, observing, and analyzing when making considerations and determining design decisions which further support the design of the design. Without this ability, it is clear that a designer will find it difficult to make design decisions and determine the design logic of the design. The design decision-making process is based on the experience and intuition of a designer who needs

to be involved to place the design process in a systematic way as a solid foundation, and it is also evident that the need for efforts in developing methodologies is often unsuccessful or becomes a problem because designers generally often reject this. which are methodological in nature (Green & Bonollo, 2004). Through reviewing the application of the design methodology in the VCD design carried out in universities, it is hoped that it can provide recommendations in formulating the form of implementing design thinking in the design drafting (VCD).

RESEARCH METHOD

This research uses qualitative and quantitative methods with a case study approach. This study observes the application of the design methodology to the Visual Communication Design that has been carried out by student designers at the two universities collaborating on this research. The method of collecting data is through literature study, documentation, questionnaires and interviews.

RESULT AND DISCUSSION

Overview of the Application of Design Methods in Design Drafting (VCD)

The implementation of the method in the design is often neglected or not realized by the students. In fact, students will be prepared to become professionals who will work in industrial spaces in the future (Zivkovic, 2016). In the future, what students need is not just technological sophistication that can facilitate their work, but students really need mental readiness to face every challenge and problem that they will face in the future. Without realizing it, it is this thought process and work process that will make them strong individuals ready to compete against future challenges.

The thought process and the work process become a single unit that builds on each other so it is important to pay attention to when starting a design. Without a clear thought process and work process, of course a designer will find it difficult to start and finish the design. For this reason, every student needs to be aware of this in starting his career in the design industry. The thinking process is carried out to build motivation and design logic while the work process is known as an effort to be able to complete the design design as a systematic work sequence so that the design work can be completed at the agreed time or known as the deadline. This is also in line with a study that reviewed the design process carried out by student designers, which is known to be different from experienced designers in that student designers require a design process with clear methods so as to assist them in building design logic and decision making (Green & Bonollo, 2004).

From the two reviews of the document design report of the Visual Communication Design'student designer above, it is known that students tend to build their design motivation with creative thinking rather than critical thinking. When building design motivation, designers should use critical thinking processes rather than creative thinking. By thinking critically, students will be able to identify problems so that they find rational reasons for the design that needs to be done. Student designers often build design motivation still with reasons that come from subjective assessments. Design motivation should be formed from objective statements through a critical thinking process so as to be able to identify problems, analyze and then draw conclusions by describing the evaluation of the best possible importance of designing the design. Whereas the motivation and design logic of a designer should be critical from the start when identifying the real problem. Errors in

point of view in identifying problems will certainly make designers when analyzing and making design decisions less targeted. In accordance with the nature of design, a designer must focus on the goal of solving problems and finding solutions through the design that is carried out and not otherwise creating new problems.

Observations of the curriculum according to Bloom's taxonomy of levels of learning for educational purposes (Magdalena, Islami, Rasid, & Diasty, 2020) also found that students need to get the cognitive and affective domains first before the psychomotor domain, so students should get a methodological understanding from the start before undertaking a design studio course. Of course, this is based on the importance of the design methodology being known by students as basic knowledge and skills that must be mastered before applying it to other Visual Communication Design processes.

Thus, it is natural for students to have difficulties in building motivation and design logic, because from the beginning they did the design students were not equipped with insight or knowledge of design methodologies so that students did their designs from an experimental process or experience alone, not from a logical systematic thinking process and work process. With this motivation and design logic, students have novelty in their design work. The work presented is not just a repetition of what has already existed, but the design work is present because it is a solution to the problems that arise at that time. The point here is that when student designers design a DKV work, it is not because they want to create new works from existing works, but create works as new solutions to the problems faced today.

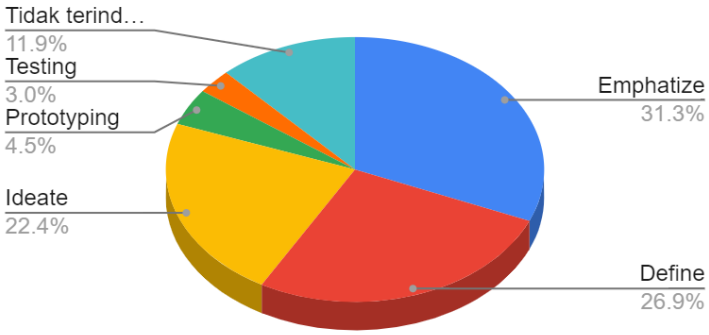

Figure 1. The stages of the most difficult design work carried out by student designers (Source: Researcher Data, 2022)

Application of Analysis Techniques and Design Methods in Design Drafting (VCD)

Analytical techniques are needed in applying the design methodology to the Visual Communication Design process. With the right analytical techniques, it will certainly help designers collect data, identify, analyze, and then conclude and evaluate the data that has been obtained. The analytical techniques used in the science of visual communication design take from the science of communication and business management. Appropriate analytical techniques really help students think critically and obtain references or considerations before making the design/design decision. "If it's an individual, then the most difficult in my opinion is the brainstorming stage to choose the concept to be used, as well as the initial data analysis" (Researcher Data Processing, 2022).

Based on the observation of student designer design report documents, it was found that Pelita Harapan University students had data analysis stages described at the design stage, while Mercu Buana University students did not find data analysis stages at the design stage.

One document performs data analysis using content analysis, while the other does not perform data analysis. The data that has been collected from the results of the research, is thoroughly described in the design data without performing data analysis techniques. Thus, of course this makes it difficult for students to transfer a lot of information from this collected research data to be converted into a design reference by the designer. By performing data analysis techniques, it helps designers compile or formulate design design references or better known as design briefs. In addition, data analysis techniques can also help designers find the characteristics or advantages of the problem so that it can be used as keywords / keywords as guidelines for building further design decisions.

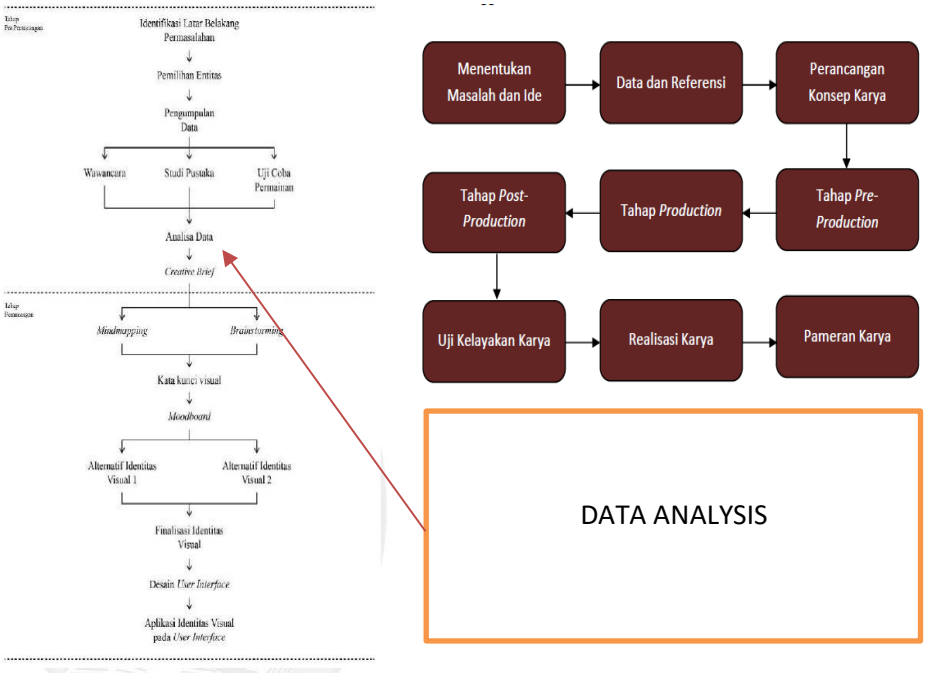

Figure 2. Data Analysis in the Design Report
(Source: Researcher Data Processing, 2022)

Application of Design Thinking in Design Drafting (VCD)

Based on the results and discussions that have been described above, a formula can then be formulated that can facilitate student designers in applying the design methodology to the Visual Communication Design process. The design method that should be used by Visual Communication Design' students is the design thinking method. There are several reasons, namely:

1. The method is a balance of critical thinking and creative thinking
2. This method is a method that is widely applied to starting a business, the Visual Communication Design is very close to business activities. Starting from designing

promotional designs, visual branding designs, designing books, comics, videos and others, all of them are very related to businesses that have certain targets.

3. The method has work stages/work processes that are easy to understand and apply. The stages of work that begin with understanding the target consumer will certainly help designers a Visual Communication Design work that is in accordance with the solution to the problem or can be called producing Visual Communication Design work that is appropriate for the target. From the very beginning, designers are invited to understand the target users about what they often complain about and what they hope to get

4. This method works repeatedly, meaning that there is always an update or novelty. Thus designers can continue to develop their ideas or design ideas until they reach the expected results

5. This method can be used in a team work system and collaborative. In the industrial world, it is known that design work is always done in a team form, not in a personal way, so that with this method the distribution of work is certainly easier and all team members can be involved or contribute.

Based on this, it is necessary to implement the design thinking method so that the stages of design work become more structured in accordance with the work steps/stages, namely: the stages of emphatize, define, ideate, prototyping, and testing. With these stages of work, the Visual Communication Design will follow the point of view of the target user or prioritize the side of the target user, not from the request side of the client/project provider or also from the designer's point of view. In addition, with the design thinking method, the thinking process used is an iterative thinking process that collaborates between critical thinking and creative thinking processes.

The first stage is the empathy stage, at this stage it begins with conducting consumer research or research specifically on the target user. If applied to the Visual Communication Design, then at this stage the designer conducts in-depth research by trying to build empathy for the target problem. For example, when it comes to visual branding issues, what designers do is do research with empathy for the target consumers of the product/brand/entity. Empathetic research is intended for designers to explore information that will be used as design data regarding things that become consumer complaints (pain) and also explore information about things that become consumer expectations (gain). When designers try to empathize, designers use critical thinking processes to identify, analyze, and draw conclusions about the problems and expectations of these consumers. In addition, designers will become more sensitive in making design decisions in the future, because they will think about designing something that consumers need or designing something that fits or is close to consumer perceptions. This initial information then becomes the key information for compiling the next stage of work in the Visual Communication Design so that the results of the design are expected to be solutive and innovative. This key information then helps designers brainstorm to find the right keywords that can shape the perception of the target user as positive. The keywords are expected to be able to describe 3 (three) things, namely emotions, characters, and certain styles adapted to the problems and objectives of the Visual Communication Design.

The second stage, define, is the next work stage of the design which re-identifies the problem (problem statement) and then arranges it in an operational definition that becomes the design reference. In the sense that this work stage is a stage to identify problems from the factors that cause them to occur and find the right point of view as a solution direction for the Visual Communication Design. Because sometimes a problem is not a problem when viewed from another perspective, for that it is needed here a critical way of thinking in identifying and then using the creative thinking process to find the right solution in the

form of a design work plan or what is often known as a design brief or also known as a creative brief. With the results of the research on target users, which become key information in the form of keywords, then adjusted to the problem statement, the designer can formulate a work plan for designing a design brief which is compiled with data analysis into the formulation of 5W1H analysis. All of the information that became the design data at the beginning was formulated with 5W1H analysis into a design work plan (design brief/creative brief). The designer then has a detailed and systematic work plan based on:

a) Who, who is the target user for the Visual Communication Design
b) What, what is the solution offered to the problem statement (problem) in the form of what kind of Visual Communication Design is?
c) Where, where the Visual Communication Design will be implemented or implemented
d) When, when can the Visual Communication Design be implemented and how long is the usefulness of the idea or concept?
e) Why, why does the Visual Communication Design need to be done immediately or this is often also called design motivation
f) How, how the results of the Visual Communication Design work can be useful for the target user and provide solutions to the problem statement (problem)

The third stage of the next Design Drafting (VCD) is the ideate stage. At this stage the designer already has user research, keywords, a clear problem statement, a work plan (brief design). So with the design data, the next step is to formulate a design idea. This stage is usually what becomes difficult for students as designers when asked to explain their design concepts/ideas. With the design thinking method, clear and detailed work stages will certainly make it easier for students to formulate their design concepts/ideas. So at this ideate stage, what a designer does is first formulate the design big idea and then determine the design strategy. So, there are 2 (two) stages of work that need to be done at the ideate stage.

The big idea of design can be formulated in a sentence in the form of a premise containing: problem statement, solution, target user, and keywords which are then described visually through a moodboard. Examples of these formulations can be applied to various types or models of any Visual Communication Design, for example:

> "The design of visual city branding as a strengthening of identity in Bangka Regency as a potential area for family tourism that is fun, safe and nuanced with a distinctive Malay culture."
>
> "The design of comics as an educational medium for campaigning to dare to reject drugs is a form of building awareness for children aged 6-12 years in the form of funny, heroic stories, and elevating local culture".
>
> "Designing promotional videos as an effort to increase consumer recognition of Generation Z towards product A so that product A is known as a quality, affordable and Korean style brand."

From the three examples above, students can formulate big design ideas more easily. With this big idea, students as designers can determine their design strategies. The design strategy consists of 3 (three) things, namely: visual strategy, media strategy, and creative strategy. The visual strategy regarding the consideration of the selection of design elements using information data is formulated in the form of content analysis as a visual language that will be used in translating big ideas. Media strategy is related to the designer's efforts to make design considerations in the selection of media that will be used in the design, both main media and other supporting media, of course the selection is based on the customer journey. Creative strategy relates to designer considerations in determining design principles and aesthetics in strengthening the design so that the design results can be the right solution and have an element of novelty. So at the stage of formulating the big

idea of design and determining the design strategy, students use creative and critical thinking processes on an ongoing basis, support and collaborate. The output of this stage of work is a moodboard that can help designers visually represent the big design ideas that have been formulated.

The next stage is the prototyping stage, this stage carries out the implementation of the big design ideas on the media that have been determined with an adjusted scale. This stage is also a design trial stage before distribution to the intended target user. At this stage the student as a designer can evaluate technical matters when the design produces a Visual Communication Design work product that is planned in accordance with the design objectives. Students use the critical thinking process to dominate in identifying any design decisions from the designs that have been formulated previously. By thinking critically, students as designers can certainly find evaluations in improving the big ideas of designing for the better and maximum.

The last stage is the testing stage, at this stage the designer distributes the results of the Visual Communication Design to the target users who are the targets of the design objectives. At this stage, students try to collect information using SWOT analysis looking at it from 2 (two) directions, namely internal and external as material for improvement in the design results for the better and maximal so that it can be of good use. This stage is carried out by maximizing the critical and creative thinking process in order to find the right decisions in order to improve the results of the Visual Communication Design to be more effective, innovative, and solutive. With this implementation, it can then be used as a reference for improving the learning module for design methodology courses so that students become easier to understand in a structured, logical and systematic way in the thinking process and the work process of designing Visual Communication Design.

Therefore, analytical techniques make it easier for designers to group the collected data to later become important information in the critical thinking process in examining problems and also in the creative thinking process when building the formulation of big design ideas/concepts. This information further facilitates the work process carried out by students so that the completion of the design is achieved effectively and efficiently. So, when students miss doing data analysis, then of course the data obtained is scattered and it becomes difficult to find the peculiarities or characteristics of the problem. Thus, if students have applied data analysis techniques, knowledge and skills / abilities of design methodologies, students will understand the way of thinking that needs to be done and also understand the stages of work / work processes that need to be completed. Student designers know the beginning and end of the Visual Communication Design process they will do.

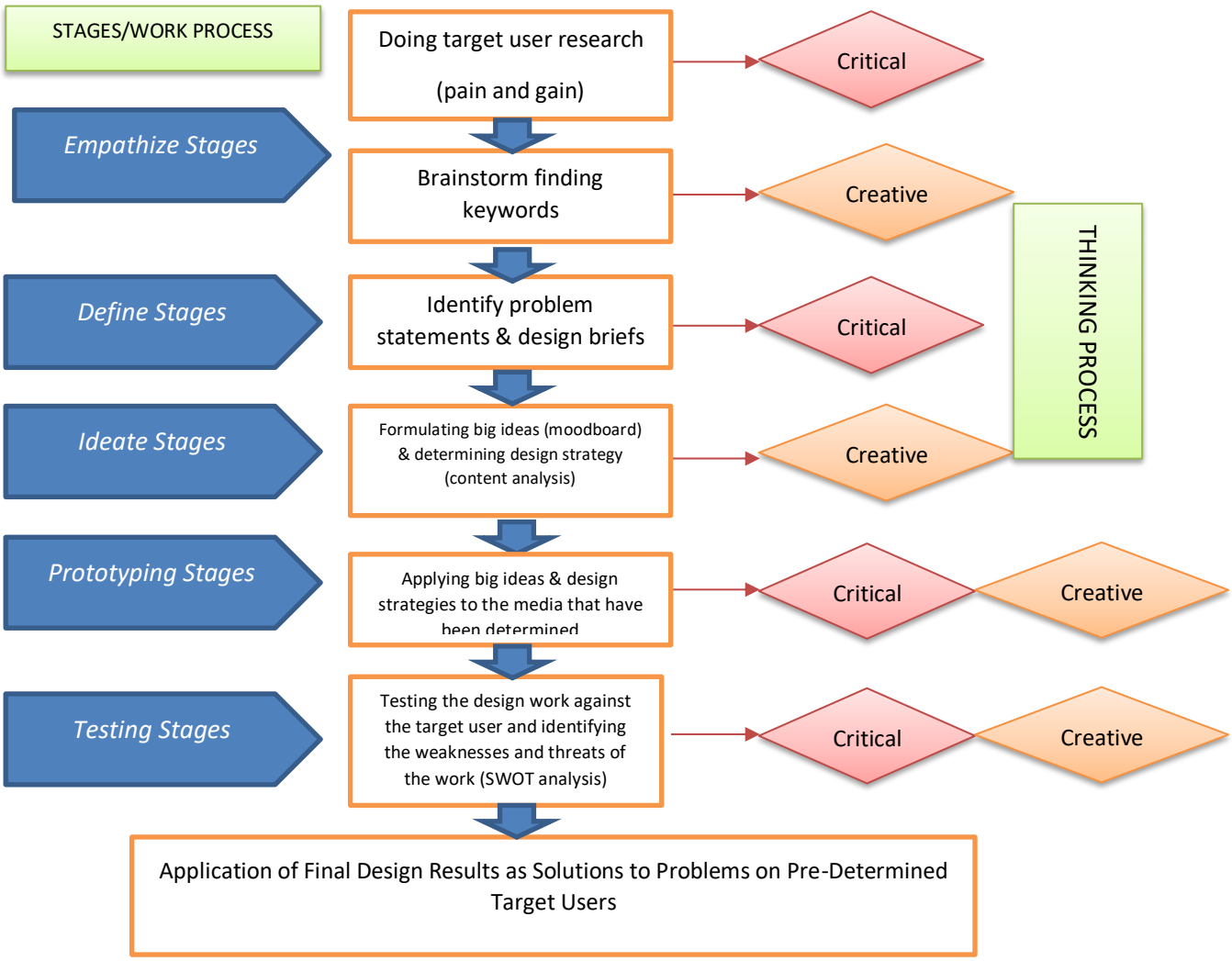

Figure 3. Work Process and Thinking Process in Design Using Design Thinking Method (Source: Researcher's Data Processing, 2022)

CONCLUSION

Design methodologies are important to become basic knowledge for student designers before carrying out Visual Communication Design in order to be able to build scientific statements through motivation and design logic. Design motivation is the initial reason for the need for design while design logic is on things that build critical and creative thinking concepts from the need for theoretical knowledge for important considerations in making design decisions. When student designers do VCD'students should be able to collaborate on critical and creative thinking processes that are more objective, logical and systematic. Thus, for design education institutions it is necessary to re-evaluate the design learning curriculum (Visual Communication Design) in order to better balance both sides of the thinking process (critical & creative thinking) in accordance with the undergraduate level so that it becomes a student experience later when they enter the world of work. Student designers who master the design methodology, will certainly understand the

thought process and work process in the Visual Communication Design so that they can present it directly or through design reports more systematically. The design thinking method used by business management in designing the right product is a method that can be implemented more easily, of course, in Visual Communication Design. A perspective that is focused on consumers or target users will certainly make the resulting design work into an appropriate work and certainly solve problems like the nature of the design.

The suggestions given can be further researched in the application of the formulation of the design thinking method to the design carried out by trials in the studio class so that the level of achievement of the thinking process and the design work process can be measured. Of course this will be able to develop the science of design methodologies to be better and more useful.

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