Application of Lateral Thinking Methods in Creative Process of Gestalt Images as a Plagiarism Prevention Efforts

Tiyas Maheni D. K.¹, Dwi Agnes Natalia Bangun¹, Anggi Anggarini¹
¹Politeknik Negeri Jakarta, Jalan. Pr. G. A. Siwabessy, Depok, Indonesia
Department of Printing Technique and Publishing

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Abstract: This article explains the application of lateral thinking methods in the graphic design process, especially in the creative process of gestalt images by students of Graphic Design Study Program to prevent acts of plagiarism. Time constraints, lack of ideas, and laziness are the three main factors causing plagiarism in the gestalt design process, supported by the ease of internet access where gestalt image references can be obtained from various sources. In an effort to prevent the occurrence of plagiarism due to the imitation of concepts, shapes, compositions, and superficiality in modifying the elements of the image at the process stage of gestalt design, students are provided with visual exploration exercises by applying lateral thinking methods. This method is applied by making alternative images that use stylation, distortion, and deformation of objects. Lateral thinking methods can reduce forms of plagiarism in the making process of gestalt images. Before the application of lateral thinking methods, the number of plagiarism-indicated works amounted to 68%. After applying the lateral thinking method, only 13% of the works indicated plagiarism and the remaining 87% were not indicated as plagiarism. Through lateral thinking methods, students make visual alternatives in the design sketching process. This exercise provides opportunities and space for students to create creative concepts, forms, and new compositions so that plagiarism in gestalt tasks can be prevented.

1 INTRODUCTION

Based on the survey conducted by the Alumni Reference Group (ARG) Team in 72 Universities in Indonesia, it was stated that there were still many who did not know and were aware of plagiarism so that they often did not realize that they had committed plagiarism. Besides, there is still wrong mindset and misperception stated that the taking of ideas, copyright and intellectual property rights is not a problem or may be already prevalent (Mochtar, 2014).

Maheni (2017) found that forms of plagiarism carried out by students in gestalt image making process by imitating the concepts, shapes and image composition, and superficiality in modifying image elements. Based on this, it is necessary to make strategic efforts in the learning process so that these actions can be prevented as early as possible so that acts of plagiarism can be avoided.

According to De Bono, the purpose of lateral thinking is to view problems in different ways, to rearrange patterns, and to generate alternatives. Lateral thinking is related to the generation of new ideas and is also related to the prison breakdown of old concepts. Liberation from old ideas and stimulation of new ideas is a twin aspect of lateral thinking. Lateral thinking is very different from vertical thinking that moves forward with sequential steps. Lateral thinking opens alternative approaches in each stage or process of thinking. Lateral thinking is not a substitute for vertical thinking. Both are needed and complementary. Lateral thinking is generative, vertical thinking is selective (Kusumarini, 2004).

Lateral thinking ability has impact to the learning achievement, which means that the better the lateral thinking skills of students, the better the learning achievement of the evaluation. There is a positive learning ability towards learning achievement, which means that the better the students’ positive thinking skills, the better their learning achievement evaluation. This means that the lateral abilities and positive thinking skills together influence on learning performance evaluation, which means that the better the lateral thinking skills and the ability to think
positively of students together, the better the learning achievement of the evaluation (Leonardt, 2015).

2 METHODOLOGY

The method used in this study is to use a descriptive hypothetical approach, which uses qualitative analysis efficiently as a supporter. This method is used to determine the actions needed in making gestalt works. The qualitative approach results will be strengthened by quantitative (comparing the images before and after applying the application of lateral thinking methods and matched with the reference images used). If the percentage numbers show that the images produced are different from the reference images is higher than the similar one, then the application of lateral thinking methods is said to be successful in reducing plagiarism.

This study uses a filling system technique, namely by making data categories classification based on the equation of visual concepts, changes in shape, changes in composition and elements combinations of gestalt images. After that the data is interpreted by the researcher, combined with concepts or theories that support understanding of the phenomenon under study. From data collection, data is processed through observation, recording, in accordance with predetermined categories.

The research was carried out with the flow chart as follows:

![Research Flow Chart](image)

In this study, 40 respondents were given specific and detail brief about the gestalt task. The task was to create a whale and giraffe using gestalt principle closure and create an apple and tree using gestalt principle (figure ground). The lecturer has determined the image of the whale, giraffe, apple and tree as a reference, which will be compared or matched with the results of the images produced by the students.

a. Phase 1

In the first phase, respondents were given the task of creating gestalt images by applying the predetermined gestalt principles (closures and figure grounds). In this stage, the construction of gestalt images has not been directed towards applying lateral thinking methods. The resulting image is matched with the reference image to be analyzed by looking at the equation of the concept, shape, composition and modification of the resulting image.

b. Phase 2

The lecturer gives guidance on the process of making gestalt images by applying the lateral thinking method, namely by making several alternative images in gestalt image assignments. This initial stage is carried out so that students get a general overview of the assignment and how to solve it. Alternative image creation can be generated by using several technics, which are stylation, distortion, and deformation, described as follows:

1. **Stylation** is simplifying or styling a form without leaving its original form. In gestalt tasks, stylation can be applied by simplifying the form, becoming an iconic form that uses lines (outlines), or reducing the details of the anatomical structure of objects. The following is the example of stylation drawing technic on whale objects; The following is the example of distortion drawing technic on whale objects;

2. **Distortion** is distorting / exaggerating / accentuating the shape of object. In gestalt tasks, distortion can be applied by changing the shape of the object of whales, giraffes, apples, and trees so that the shape is no longer exactly the same as the original shape, but objects can still be identified. The following is the examples of distortion drawing technic on whale objects;

3. **Deformation** is rearranging the shape of the object. In gestalt tasks, deformation can be applied by rearranging the shape of objects of
whales, giraffes, apples, and trees with other forms, such as geometric shapes or abstract shapes so that they eventually form objects of whales, giraffes, apples, and trees. The following is the examples of deformation drawing technic on whale object;

**Figure 4. Examples of picture using deformation technic**

In the sketching process, the lateral thinking methods is applied by making 5 (five) alternative images for each object and students are given the freedom to use stylation, distortion, deformation, or a combination of the three.

**Figure 5. Lateral thinking method in gestalt images making process**

From several alternative images, one gestalt image is selected and then be finalized. At the gestalt image selection stage, there is a lecturer intervention on the alternative image made by the respondent, which is controlled through the assistance sheet.

**Figure 6. Reference image of whale and giraffe using closure principle of gestalt**

Source : Google and Pinterest

**3 RESULT AND DISCUSSION**

The application of lateral thinking methods as a prevention strategy for plagiarism in the making of gestalt images, is achieved by comparing the results of gestalt images produced without applying lateral thinking and those produced by applying lateral thinking. The comparison between those phases is whether the respondent has changed the concept, changed the form, changed the composition and modified the reference / reference image used.

The comparation result is as follows:

<table>
<thead>
<tr>
<th>Gestalt Image Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gestalt Images Alternative Selection</td>
</tr>
<tr>
<td>Gestalt Image Production by Using Lateral Thinking Method</td>
</tr>
<tr>
<td>Gestalt Image Alternative 1 (Stytlation)</td>
</tr>
<tr>
<td>Gestalt Image Alternative 2 (Distortion)</td>
</tr>
<tr>
<td>Gestalt Image Alternative 3 (Deformation)</td>
</tr>
<tr>
<td>Gestalt Image Alternative 4 (Combination between drawing technic)</td>
</tr>
<tr>
<td>Gestalt Image Alternative 5 (etc)</td>
</tr>
</tbody>
</table>

**Comparison result of gestalt images without applying lateral thinking**

Based on the table above, data shows that the gestalt images made by respondents without applying the literal thinking method are still indicated by plagiarism (having similarities with the reference image used) more than 60%. Only 33.8% made changes to the concept, 31.9% made changes in form, 29.4% made changes in composition and 31.3% modified the reference image.

While the results of the comparison of gestalt images produced by respondents after applying lateral thinking methods are as follows:

**Figure 7. Reference image of apple and tree using figure ground principle of gestalt**

Source : Google and Pinterest
Based on the table above, there is a significant difference in the number of plagiarism-indicated works between the gestalt images made without applying lateral thinking methods and alternative gestalt image results are made by applying lateral thinking methods. On images that do not apply lateral thinking methods, 68% of the images indicated plagiarism. Whereas in the results of the drawings made by applying the lateral thinking method, 13% of the images indicated plagiarism thus the majority (87%) of the work of the respondents did not commit plagiarism.

4 CONCLUSION

The application of lateral thinking methods in making gestalt images can or successfully reduce the number of works indicated by plagiarism. The better the lateral thinking abilities possessed by students, the more original work can be produced in the making of gestalt images. The lateral thinking method in making gestalt images is applied by making alternative images using stylization, distortion, deformation, or a combination of the three.

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