Connoisseurship Evaluation In Digital Painting Among Art Teachers In Malaysian Secondary School

Azimah A. Samah [1], Zaharah Hussin [2], Abu Talib Putih [3]

ABSTRACT

Connoisseurship evaluation is a form of evaluation and educational inquiry having qualitative characteristics. In this study, these skills are seen among Malaysian art teachers in secondary schools. Quality assessment depends on the evaluator who has the ability of some aspects. Among these are qualitative nuances experiences as well as ability to judge the goodness of the quality artwork. This study aims to look at the quality and evaluation skills of art teachers in Malaysia. The quality of the work will be seen on school students’ digital painting. The evaluation includes composition elements, color, interpretation and creativity of the digital painting. This study employed a quasi-experimental methodology with a single-group design to examine the digital painting among 53 students selected from schools in two districts of Selangor. The paintings were examined by two teachers in art and design education. The group’s production of painting was analyzed using Manova repeated measures to determine the skills of evaluating among the art teachers. There was a similarity in marks given among the teachers in four aspects of productive dimensions: composition, color manipulation, interpretation and creativity. This indicated that teachers were able to evaluate according to their expertise in art and design. This study offered a means to assist teachers with appropriate evaluation strategies in digital painting. In theory, this study will add to the understanding of cognitive systems and human information processing that relate to visual imagery system and skill of evaluation.

Keywords: Connoisseurship Evaluation; Digital Painting; Art Teachers

INTRODUCTION

Connoisseurship evaluation is a form of evaluation and educational inquiry having qualitative characteristics. In this study, these skills are seen among Malaysian art teachers in secondary schools. Quality assessment depends on the evaluator who has the ability of some aspects. Among these are qualitative nuances experiences as well as ability to judge the goodness of the quality artwork. This study aims to look at the quality and evaluation skills of art teachers in Malaysia. The quality of the work will be seen on school students’ digital painting. The evaluation includes composition elements, color, interpretation and creativity of the digital painting. This study employed a quasi-experimental methodology with a single-group design to examine the digital painting among 53 students selected from schools in two districts of Selangor. The paintings were examined by two teachers in art and design education. The group’s production of painting was analyzed using Manova repeated measures to determine the skills of evaluating among the art teachers. There was a similarity in marks given among the teachers in four aspects of productive dimensions: composition, color manipulation, interpretation and creativity. This indicated that teachers were able to evaluate according to their expertise in art and design. This study offered a means to assist teachers with appropriate evaluation strategies in digital painting. In theory, this study will add to the understanding of cognitive systems and human information processing that relate to visual imagery system and skill of evaluation.
Evaluation is defined as a qualitative judgment of specified value. Assessment generally involves measurement form and is usually expressed in quantitative statement. Assessment is useful because it not only provides information but enables one to see the effectiveness of teaching and learning by variable degrees of accuracy (Banks, 2012). Among the questions arising in the assessment of art is to which extent the needs of assessment? How should the aesthetic quality and creativity be measured? Do measurement processes restrict or impede the quality in art judgment (Taylor & Nolen, 2008; Vickerman, 1986).

Rating a painting is part of art and design evaluation that is considered too diverse and tends to be individual. It is a student’s personal activity that does not need to be assessed as assessment in math and science. Subjects such as science and mathematics are governed by a set of rules that provide consistent results. Therefore, assessment of student ability can be objectively implemented. Art and design is not related to the detailed solution of a problem. It is more about looking at diversity issues of the artwork. Therefore the quality assessment in art and design education is not subject to a set of common rules of governance. The main justification for the arts subject’s position in the curriculum is more of opportunity to develop the mindset and skills as well as ability and self-expression (Allison, 1986; Hackett, 2016).

The issue of objectivity in art is the possibility of making an assessment of skills, knowledge, values and attitudes. This output is calculated as important in education. This requires the evaluator to make the specification of performance at various levels of student progress and explain the art assessment criteria. Objectivity is typically used in extracurricular activities that lead to the facts and evidence (Aspin, 1986; Guskey & Lee, 2013).

Connoisseurship Evaluation in Art Education

Connoisseurship evaluation is a form of educational inquiry, which had the characteristics of qualitative evaluation. It refers to one’s expertise in terms of “sense” evaluation in form of art criticism such as literature, theater, film, music and visual arts. Evaluator in the term of connoisseur is a competent appraiser to make a critical assessment based on knowledge (Funk & Wagnalls, 1984). The ability to make refinements in the discrimination between complexity and fine quality are examples of so-called connoisseurship. Connoisseurship is the art of appreciation.

The qualitative mode stand at the end of the assessment formulation. It is from the meaning the student achieved. Artwork is seen entirely qualitatively. This includes performing arts such as symphony, poetry, ballet and visual arts as well. It is subject to the capacity that evokes the perceptive power of one’s intelligence experience that leads to the artwork. Connoisseurship is a manifestation of the experience perception. It serves as a transaction between the quality of the environment and what we bring to the quality. This experience character is influenced by our ability to differentiate between the qualities that are seen (Stufflebeam, 1981).

The ability to make refinements and discrimination between complexity and fine quality are examples of so-called connoisseurship. Connoisseurship is the art of appreciation. Connoisseurship is also a process. How to understand connoisseurs? It is a matter of recognition (Barnett, 1994). This recognition or identification requires perceptive power or the ability to differentiate and experiencing connection. For example the quality of the tongue sensation in enjoying a variety of drinks. It is the interplay of experience in qualitative connection (Eisner, 1998a).

Connoisseurship requires sense of concern, awareness and the quality of appearance. In this study context, the quality of the painting appearance is the most dominant in determining the evaluation (Ebitz, 1988). Among these are compositions, color and textures on the painting. All of these qualities along with other criteria, forms the appearance of a painting which provides potential experience. Experiencing this transaction is a manifestation of the evaluator’s qualitative intelligence. Connoisseurship relies on high level of qualitative intelligence in the domain of operation. In this context it refers to the domain of art appreciation which is one of the criteria of painting evaluation (Eisner, 2003; Maginnis, 1990).

Connoisseurship also depends on the ability to experience and feel the quality of a sample from a larger set of quality. It is not as easy as an aspect of the senses alone. Perception is one of the focus sensing
quality aspects besides the overall of quality available. Evaluators may feel the effect later through different talented quality artwork and link it with their quality of experience. Students’ artwork even students themselves, are never the same. The evaluator can determine the grade of each painting and assign it into a rating class (Stokrocki, 1991). In order to determine it into the correct rating class, it should be within the scope of perception. This includes considering the difference between the perception details. Therefore reference memory faculties of perception are needed. It refers to the concept of composition, color, texture and creativity (Eisner, 2002).

Prior Knowledge Usefulness (antecedent) In Connoisseurship

The evaluation connoisseurship is more than the ability to distinguish subtle and complex quality in painting. It is not just about differentiating another painting into sensory memory, but also influence the evaluator’s understanding of the conditions that may trigger such quality. It contributes to the ability to feel the experience. Each painting itself is a manifestation of the design principles. Knowledge of the design principles gives the ability to experience the quality of the painting to be evaluated (Stokrocki, 1991).

Prior knowledge factors or antecedent factors are relevant to feel the painting quality. Knowledge of antecedent factors can provide guidance in finding quality and assessing the painting. Furthermore connoisseurship allows adjustment in the evaluation process based on guesses (Eisner, 1998b).

Quality assessment depends on the evaluator who has the ability of some aspects. Among these are qualitative nuances experiences as well as ability to judge the goodness of the artwork quality. At the end of the process, the qualitative experience is a quality of measurement rather than a formula. Paintings do not come in standard form. Color values and their nature are varied. The difference in raw materials such as canvas and color pigments should be taken into account in determining the quality of a painting (Sanders & Davidson, 2003).

Epistemic Vision.

Connoisseurship process can be understood as an example of epistemic vision. Episteme refers to knowledge and epistemic vision is a storage form of epistemic knowledge acquired through vision. In this case, vision refers to quality that requires sensory sensitivity thus assessment and evaluation of works begin from one’s sight. Hence there must be an awareness of the quality of the artwork before judgment is done. The evaluator sensitivity on the quality of art and painting design principles would provide knowledge on the quality of painting itself and also the overall quality of the paintings to be evaluated (Eisner, 1998).

Primary epistemic vision depends on a vision awareness upon certain criteria of an art work. Secondary epistemic vision refers the criteria as a part from a larger set. Obviously artwork evaluations, especially painting should be viewed as a whole rather than a separate unit. Connoisseurship is acquiring visual meaning through complicated, nuanced and subtle aspects in a field of interest (Freedberg, 2006).

Connoisseurship is art appreciation. To appreciate a work of art means one must feel the quality that formed the artwork and understand its contents. It includes judging the value contained in it. Connoisseurship as an appreciation not only requires a positive aspect alone. What is desired is a complex experience, smooth and informative. The evaluator can assist individuals to scrutinize something that cannot be detected by the individual. In this process, it increases the level of connoisseurship. Connoisseurship mode is considering the quality of value. It is clear judgment on the quality of painting and depends on the experience of the evaluators. In addition the appropriate application and criteria from the essence of the design principle itself is also important (Freedberg, 2006; Sanders & Davidson, 2003).

Expressive Evaluation Criteria

The assessment should be done expressively similar to the art work as well. Student artwork should be viewed in terms of communicating meaning. What is the message behind the art production? Does self-expression significantly visualize? This refers to their understanding of the main theme. Students’ self communication should consider on mood, feeling or whatever they want to express. In approaching art, the composition or arrangement should display confidence and freedom. This can be detected through the efficiency and certainty in dealing with the main subject and the medium. The lines must be clear and decisive, accurate according to size, smooth, flowing and seamless. However, it must be composed with
feeling that showed the artists know what they are doing. Compositions lacking in confidence and competence portray an imitation, mimicry and stereotype (Michael, 1980; Stufflebeam, 1981).

In addition, the evaluator should also examine the aesthetic sensitivity and harmony composite organization. This requires a deep knowledge of art. Basic aspects of aesthetic consideration is the perfect arrangement, unity and consistency. The structure includes not only the look and shape but also the color, texture and other elements in the arrangement. Students will prepare and it is composed in a different way and there is not one artwork done in the same way (Parsons, 1996; Sinclair, 2015).

Something that should not be ignored is the element of creativity, uniqueness and authenticity of the artwork being assessed. Various colors irregularities, shape, configuration, composition and genuineness of the study subjects and media applications are indicators to the authenticity and personal statement. Expertise and experience of evaluators is essential in identifying these elements. The evaluator should also be proficient in detecting students’ skills in using the art medium and appropriate processes in order to disclose self-expression in their artwork (Dorn, Deja, & Sabol, 2004).

In addition, the involvement of students in enjoying their experience should be taken into account. It means the students’ attitudes toward their artwork. Normally their deep involvement can be traced on the sincerity of expression and excellent technique implemented in such works. Individuals who enjoy art work tend to portray the subject of their art work and media with Gestalt theory. There is a remarkable achievement for a given time and the effortness to complete the work (Hergenhahn & Olson, 2005; Wachowiak & Clements, 2001).

All of these discussed attributes prove the cognitive skills, affective and psychomotor with tendency to be developed through a creative art process. Hence the evaluators should have a high level of ability to see those elements in the student’s artwork. Evaluators should be able to identify important aspects such as communication, expression, self-confidence, perceptual sensitivity, consistent aesthetic arrangement, creativity, painting skills, enjoyment and satisfaction in students’ work. This experience was the highest point of the basic human development capacity of thoughts, feelings and observations. Aesthetic experience is the integration and a value-added during artwork production (Michael, 1980; Nimkulrat, Niederrer, & Evan, 2015).

**Artwork observation and assessment based on Artistic Value and Aesthetic Emotions**

Art is different compared to science in terms of methods, experience and observation from a psychological standpoint. It refers to a way of thinking and perception. Based on the theory of artistic, artwork can be considered as a phenomenon or idea to be observed just like other images and create new meaning concept. It is not visible to the naked eye to be interpreted. Artwork in the form of an image can be regarded as an allegory that uses the symbol in delivering a deep understanding. Overall psychological effect of a work of art is indirect (Vygotsky, 1971).

Art requires intellectual touch. Artwork is either invention or evaluating, it is often accompanied with deep emotion even though it is a marginal phenomenon and not part of the art process. Understanding of these observations allow some ideas to be understood. In addition, the pleasure of feeling and soul from the observation is an artistic pleasure. Visual artwork particularly painting comes from the mind training and feelings. There is no other way to deliver the external meaning in order to explore this element because it can only be obtained when an individual includes the whole feelings together. A painter is able to produce perfect lines sparked by the strength of feeling.

If the characteristics of artwork are based on form, so emotion too is a form required in artistic expression. This emotion process is governed by formula from image to the idea, and from idea to emotion. During the image observation, emotion process develop from an emotion form to the next sequel. A good artwork can encourage us to appreciate it and transform it to a better life emotion. Thus the art appraiser must have a sensitivity quality of aesthetic emotion and artistic expression (Bell, 1988; Howard, 1977).

**Creativity Evaluation In Painting**

Creativity is a natural instinct and human desire. Creativity is the ability to create new ideas and symbolism and update existing symbolism. Creativity refers to the ability to make a restructuring of existing
organizations by consolidating previous ideas to new ideas. Obviously creativity is the ability to create new ideas with improvements and improvisations (Csikszentmihalyi, 1996).

According to Khatena (1999), quoting from Albert Einstein, imagination is most useful in the formation of knowledge and creativity. Imagination is the breath of life to acquire knowledge, to give form and shape. Imagination shapes the life energy derived from the cosmos to the vision, action and expression of creativity. Normal level of creativity happens when imagination leans to the mental and emotional operation. The information processing depends on individual creative action.

Arts education fosters creativity by promoting higher order thinking process, such as a creative imagination. This thinking process encourage creative imagination. Student creatively come out with different elements and material with stylist bold attempt. It is a satisfaction to explore ambiguity and also the ability to recognize a variety of perspectives. In this context evaluators need to acquire the desire that intends to transform ideas, images and feelings in the form of art (Wachowiak & Clements, 2001).

Creativity Nurturing Approach and Expression in Painting Production

In this phase of creative expression development, students focus on creative problem solving and participate in the process of producing original artwork. They develop a natural ability to learn visual art elements such as line, shape, color and begin to organize these elements according to design principles such as balance, contrast and emphasis. Students gain confidence in interpreting the concept and idea when they apply the skills, techniques and methods as an individual expression through a variety of art forms. Hence they develop the flexibility and sensitivity when they understand self-expression as well as the work of others. The role of the evaluator is to detect insights and have art communications digested in their works through the reflection of the theme, mood and feelings (Gee, 2000).

Artworks produced by students are objects that have meaning, display the reflection of artistic and aesthetic value of sensory perception and appreciation. They involve elements of motivation and interaction between students and their environment (Dorn, Deja, & Sabol, 2004).

Creative Expression of Painting

Artists expressions are rather complex because they portray individual situations from different projected view angle, the interpretation and unique personal feelings, thoughts and perceptions about something. In art, this projection is displayed in a visual form. This will be a creative expression as each individual is unique and different. Individual hand work results are different and each has its own uniqueness. Aesthetic value presented here is sensitivity to color, shape, line, texture, movement and value.

This element is neatly arranged and composed together. It evokes the feeling of presence, self-perfection and consolidation of the artist in the work. Art principles such as balance, rhythm, contrast, diversity and consistency bring to the level of perfect order or higher order. At this perfect level, humans are more sensitive and use the natural functions of thinking, feeling and perception to express themselves aesthetically. At this stage there is a quality absorbed in the experience of art (Michael, 1980; Schonau, 1996).

The Relation of Artistic Expression and Artwork Authenticity

This artistic expression enable the evaluator to feel the artists’ sensation through their work. They can understand the connection between taste and common interest and the presence of feeling in their artwork. Artwork production, especially painting is becoming more individualistic and imaginative. Evaluators need to be more sensitive to personal choice based on the acquisition of skills and expertise through the various approaches. This aspect highlights the originality or the genuine work.

In this study, it refers to the artistic value in compositions, colors and textures. This is the beginning of the art appreciation in historical and cultural context for the art creation besides increasing public awareness. However, humans may have different merits assessment of this art form. In the theory of expression, an original work of art is an artifact that expresses experiences beside evoking and maintaining the aesthetic experience (Gardner, 1973; Khatena, 1999; Michael, 1980; Osborne, 1988).

Mental Processes and Creativity

Creativity is also based on the use of metaphor and analogy and the ability of individuals in processing
the visual experience and creating a transformation through art (Nasir Hassan Ibrahim & Iberahim Hassan, 2003). This success stems from the perception interpreting skills. In this context, the observations provide visual experience. Individuals understand visual information in various ways. Perception and kinesthetic push, psychological character, is important in the visual process and these determine how we receive and interpret visual messages. This visual literacy development helps visual intelligence to develop creativity. This is because the visual representation of the environment can be replicated and modified in the artwork (Dondis, 1975).

**Perception Role and Memory in Visual Imagery**

Observation, perception and memory are clearly related since they share common elements. It should be seen together with other topics to get a clear understanding. The fact is that observation is a result of various variables input. A perception study is an attitude more towards behavior study. In the study of perception, the stimulus focus aspect implicitly produce and evoke individual sensory response. Theorists said that stimuli experienced coding, analysis, conversion, storage and reinstatement. This implies an information processing (Dick, 1971). So when an evaluator is given a pictorial stimulus for assessment through painting production, there will be valid observation and by their perception, the information is processed into visual imagery. Visual imagery as a mental process operates based on Gestalt psychology. This process in turn leads to a movement direction of the brain psychomotor translated into evaluating the digital painting.

**OBJECTIVES**

This study aims at investigating the quality and evaluation skills of art teachers in Malaysia on digital paintings produced by Form Four students in secondary school. The quality of the work will be seen in school students’ digital painting. The evaluation includes composition elements, color, interpretation and creativity of the digital painting. The research objectives are:

1. To examine the art teachers’ visual imagery in evaluating digital paintings that cover aspects of composition, color, interpretation and creativity.
2. To examine the art teachers’ consistency in judging digital painting.

Connoisseurship evaluation is a form of evaluation and educational inquiry, which have qualitative characteristics. In this study, these skills are seen among Malaysian art teachers in secondary schools. Quality assessment depends on the evaluator who has the ability of some aspects. Among these are qualitative nuances experiences as well as ability to judge the goodness of the quality artwork.

**Method and methodology procedure**

This study employed a quasi-experimental single-group design to examine the digital painting among 53 students selected from schools in two districts of Selangor. All respondents were given a treatment of using digital media in their production of paintings. The paintings were examined by two teachers. The group’s production of painting was analyzed using Manova repeated measurement.

Studies were conducted on two evaluators who are secondary school art teachers. Both of them evaluated the work of digital paintings of 53 Form Four students. Each student produced two digital paintings. This means that the evaluators will assess a total of 106 paintings. Judgements focus on four aspects of composition, color, interpretation and creativity. Data on the four aspects were collected from two works of digital paintings produced by each student. In this study, the independent variable is the evaluator. The dependent variables were student achievement through four aspects, that is composition, color, interpretation and creativity and measured using interval scale. This study aims at analyzing the difference of the scores given by the two evaluators or the art teacher. Data were collected from painting 1 or pre-test and painting 2 or post test. The statistical test used was one-way Manova test.

This study collected data from student involvement in the experimental group. The design carried out was the treatment group from intact group to study the effect of dependent variables (Stanley & Campbell, 1966). The study was conducted using a sample of all students in a class. The paintings were made before
and after treatment. Treatment given was how to manipulate and use Adobe Photoshop as a digital painting medium. Measurement or observation was made by the evaluators in a period before and after treatment.

RESULTS AND ANALYSIS

Objective 1

To examine the art teachers’ visual imagery in the evaluation of digital paintings that cover aspects of composition, color, interpretation and creativity.

Table 1  Evaluator Mean  in Painting 1 / Pre Test

<table>
<thead>
<tr>
<th>Painting 1/ Pre test</th>
<th>Evaluator</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>1</td>
<td>8.4528</td>
<td>2.21504</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7.9434</td>
<td>1.81251</td>
</tr>
<tr>
<td>Color</td>
<td>1</td>
<td>8.6038</td>
<td>2.07864</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7.8113</td>
<td>1.96172</td>
</tr>
<tr>
<td>Interpretation</td>
<td>1</td>
<td>5.2075</td>
<td>1.06263</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.8302</td>
<td>1.01405</td>
</tr>
<tr>
<td>Creativity</td>
<td>1</td>
<td>5.0377</td>
<td>.87623</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4.6604</td>
<td>1.01798</td>
</tr>
</tbody>
</table>

Referring to the mean value of each independent variable between the scores given by both evaluators, the evaluation showed that the mean area is close. The difference is quite small (mean score: evaluator 1 = 8.45, evaluator 2 = 7.94). Similarly, in color, the mean difference between the two evaluators was not significant (mean score: evaluator 1 = 8.60, evaluator 2 = 7.81). There is very little difference in terms of interpretation (mean score: evaluator 1 = 5.20, evaluator 2 = 4.83). The fourth aspect of creativity also recorded a marginal difference (mean score: evaluator 1 = 5.04, evaluator 2 = 4.66).

Table 2 Manova Pre test / Painting 1Multivariate Tests

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluator</td>
<td>W. Trace</td>
<td>2.183b</td>
<td>4.000</td>
<td>101.000</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>W. Lambda</td>
<td>.920</td>
<td>2.183b</td>
<td>4.000</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>H. Trace</td>
<td>.086</td>
<td>2.183b</td>
<td>4.000</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>R. Largest Root</td>
<td>.086</td>
<td>2.183b</td>
<td>4.000</td>
<td>.076</td>
</tr>
</tbody>
</table>

Overall, the results of Pillai’s Trace Multivariate tests showed that there is no significant main effect of independent variables for the evaluator category \( F(4, 101) = 2.18, p > .05 \) on the four dependent variables. Based on the results of this analysis, clearly proven there is no score difference was given by the two art teachers.
Table 3 The results of Manova Painting 2 / post test

<table>
<thead>
<tr>
<th>Painting 2/ Post test</th>
<th>Evaluator</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>1</td>
<td>9.7358</td>
<td>2.07690</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>9.2830</td>
<td>1.98434</td>
</tr>
<tr>
<td>Color</td>
<td>1</td>
<td>9.9811</td>
<td>2.17052</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>9.4906</td>
<td>2.17169</td>
</tr>
<tr>
<td>Interpretation</td>
<td>1</td>
<td>5.8868</td>
<td>1.48920</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>5.7547</td>
<td>1.41293</td>
</tr>
<tr>
<td>Creativity</td>
<td>1</td>
<td>5.5283</td>
<td>1.43586</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>5.6226</td>
<td>1.28940</td>
</tr>
</tbody>
</table>

Table 3 shows a relatively small difference in mean value for the composition skill aspect (mean score: evaluator 1 = 9.74, evaluator 2 = 9.28). Similarly, in color, the mean difference between the two evaluators was not significant (mean score: evaluator 1 = 9.98, evaluator2 = 9.49). There is very little difference in terms of interpretation (mean score: evaluator 1 = 5.89, evaluator 2 = 5.76). The fourth aspect of creativity also recorded a marginal difference (mean score: evaluator 1 = 5.53, evaluator 2 = 5.62).

Table 4 The Results of Manova Painting 2 / post test - Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluator</td>
<td>Composition</td>
<td>5.434</td>
<td>1</td>
<td>5.434</td>
<td>1.317</td>
<td>.254</td>
</tr>
<tr>
<td></td>
<td>Color</td>
<td>6.377</td>
<td>1</td>
<td>6.377</td>
<td>1.353</td>
<td>.247</td>
</tr>
<tr>
<td></td>
<td>Interpretation</td>
<td>.462</td>
<td>1</td>
<td>.462</td>
<td>.219</td>
<td>.640</td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>.236</td>
<td>1</td>
<td>.236</td>
<td>.127</td>
<td>.723</td>
</tr>
<tr>
<td>Error</td>
<td>Composition</td>
<td>429.057</td>
<td>104</td>
<td>4.126</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Color</td>
<td>490.226</td>
<td>104</td>
<td>4.714</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interpretation</td>
<td>219.132</td>
<td>104</td>
<td>2.107</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>193.660</td>
<td>104</td>
<td>1.862</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Composition</td>
<td>1002.000</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Color</td>
<td>1054.000</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interpretation</td>
<td>3811.000</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>3489.000</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected</td>
<td>Composition</td>
<td>434.491</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Color</td>
<td>496.604</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>193.896</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Interpretation</td>
<td>219.594</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>193.896</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. $R^2$ Squared = .013 (Adjusted $R^2$ Squared = .003)
b. $R^2$ Squared = .013 (Adjusted $R^2$ Squared = .003)
c. $R^2$ Squared = .002 (Adjusted $R^2$ Squared = .007)
d. $R^2$ Squared = .001 (Adjusted $R^2$ Squared = .008)

The results of the analysis in Test of Between-Subject Effects in Table 4 showed there is no effect of evaluators category on the dependent variable in the study of the composition assessment color, interpretation and creativity. Results of the analysis prove there is no significant effect of the evaluator category on the composition [$F(1, 104) = 1.32, p > .05$] and color [$F(1, 104) = 1.35, p > .05$]. Similarly, there were no significant effects for the interpretation assessment [$F(1, 104) = .219, p > .05$] and evaluation of creativity [$F(1, 104) = .127, p > .05$] among evaluators in this study. The results showed there was no significant effect of evaluator category of all dependent variables of the four assessment aspects in this second digital painting.
Objective 2

To examine the art teachers’ consistency in judging digital painting.

Figure 1. Mean difference graph lines for Painting 1 / Pre-Test.

Lines in Figure 1 show the differences of the mean values are quite small between the two evaluators for the four aspects of composition, color, interpretation and creativity. For composition and color, at one point the line is crossed. It shows the similarity in values given by the two evaluators in terms of composition and color in digital painting. There is a somewhat flat line graph for interpretation and creativity aspect. Parallel line graph shows consistency in giving scores between the two evaluators.

Figure 2. Line graph for mean difference in Painting 2 / Post-Test.

Lines in Figure 2 show the differences of the mean values are quite small between the two evaluators for the four aspects of composition, color, interpretation and creativity. For composition and color, the lines
are parallel. It shows consistency in the valuation given by the two evaluators in terms of composition and color in digital painting. The line graph is somewhat flat for interpretation and creativity aspect. It shows the differences in the mean value are very small between the two evaluators.

**RESEARCH FINDING**

There was a similarity in marks given among the teachers in four aspects of productive dimensions: composition, color manipulation, interpretation and creativity. This was to indicate that teachers were able to evaluate according to their expertise in art and design and painting as well. This study offered a means to look at and compare teachers’ appropriate evaluation strategies in digital painting (Shinkfield & Stufflebeam, 1995).

In theory, this study will add to the understanding of cognitive systems and human information processing that relate to visual imagery system and skill of evaluation. The main point here is the perception and interpretation of the evaluator in an assessment situation is influenced by the relevant knowledge scope. The relevant knowledge of detailed assessment scope are not necessarily limited to the knowledge of mere observation only. In addition, the evaluator’s understanding of the theory of teaching and learning as well as sensitivity to the demands of the educational process, needs to be seen and interpreted (Dunleavy, 2005; Foss, 2005).

Knowledge relevant to the observation in this evaluation situation arises from a general knowledge regarding the theory of education and specific knowledge of visual art itself. In general, knowledge domain widened the concern on the assessment situation. Therefore an experience will increase differently. Knowledge is relevant to the situation which provided new insights that can be reviewed. Knowledge can also be a limit to evaluators’ perceiving in certain situations. Hence the evaluators must be among specialists in visual arts, especially painting (Denton 2005; Eisner, 2002).

The antecedent knowledge provided useful indications and gave shape to perception and evaluation. What is observed is normally influenced by this knowledge (Dake, 2005).

From one perspective, the assessment of connoisseurship dimension aimed at testing students to ensure their academic achievements. It appeared as a possible way to identify student skill in producing painting. Connoisseurship evaluation is practical and in line with the school teaching and learning methods (Barry, 2005).

**REFERENCES**


