A comparison of first and eighth grade students' artistic spontaneity and creative expression

Mary Deborah Abel
Rowan University
A COMPARISON OF FIRST AND EIGHTH GRADE STUDENTS ARTISTIC SPONTANEITY AND CREATIVE EXPRESSION

by

Sister Mary Deborah Abel

A Thesis
Submitted in partial fulfillment of the requirements for the Master of Arts:

Subject Matter Teaching: Art

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Approved by

[Signature]

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The purpose of this study was to investigate the students’ creative expression as influenced by formal education. The problems of this study were to determine if there was a difference between the perception and use of color by students in primary grades with junior high students, and also if there was a difference displayed in drawing spontaneity related to age.

Two art classes totaling fifty-four students comprised Group A, the primary students, and one class of thirty eighth grade students made up the junior high group for Group B. Students in both groups received a common introductory lesson relating the importance of art and how the skill of rendering can be successfully approached by anyone. Both groups were directed to complete a drawing of a tree in a season of their choice. Directions were given beforehand to ground the tree, use pattern and texture to create contrast and apply color with crayons enhanced by the shading and mixing of colors. The researcher and a qualified fifth grade teacher, with a background in art education, evaluated each student’s drawing to determine if a substantial difference existed between the quality
of the renderings of both groups based upon the ability to visually discriminate the four primary characteristics of shape, pattern, texture, and shading. Mean scores, standard deviations, and a least squares ANOVA were calculated.

The researcher failed to find a significant difference between Group A and Group B in the analysis of rendering skills.
MINI-ABSTRACT

Sister Mary Deborah Abel

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Thesis Advisor: Dr. Lili Levinowitz

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The problems of the study were to determine if there was a difference between the
perception and use of color by students in primary grades with junior high students;
secondly, if there is a difference displayed in drawing spontaneity related to age.

The researcher failed to find a significant difference between the perception and use
of color exhibited by the first graders in contrast to the eighth graders tested for this
experiment.
Acknowledgments

The researcher is deeply grateful to a number of individuals who contributed significantly to the completion of this study. Members of the administration and teaching staff in Saint Katharine of Siena School offered encouragement and support throughout the study. Special thanks go to Sister William Therese, my principal, to the first and eighth grade students who enthusiastically participated in this study, and to Ruth Sullivan, my colleague whose assistance in assessing the drawing test used as data for this study, was invaluable. Special appreciation is extended to my family, friends and the Archdiocesan Art Curriculum Committee for their interest, assistance and encouragement. My deepest, heart-felt gratitude is extended to Tricia Polizzi, an exceptional eighth grade student who worked as my personal secretary and was so generous with her time and expertise.

A special thank you to Kas Savage, the school’s computer teacher who not only granted Tricia unlimited access to the computer lab, but she also guided Tricia as she worked tirelessly in completing this thesis. And last, but certainly not least, I am most grateful to my advisor, Dr. Lili Levinowitz. This project would never have been completed without her help, encouragement, and consideration in bringing her class to my school for so many weeks.
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Chapter I

Introduction

Artistic spontaneity and creative expression provide students with the incentive to draw. By discussing characteristics such as shape, texture, color proportion and component parts, students develop an awareness and realization that art is primarily a means of expression.

Lowenfeld reinforces this premise by stating that:

Art plays a crucial part in our educational system, particularly in the area of perceptual growth, the developing awareness toward those things around us through all our senses; through creative growth, the development of characteristics of flexibility, imaginative thinking, originality, and fluency of thinking; also through emotional growth, the ability to face new situations, the ability to express both pleasant and unpleasant feelings.¹

Observing students in a classroom situation, the art teacher recognizes the spontaneity exhibited by students in the primary grades. Once given a specific theme, younger students plunge right in and begin executing their drawing. Whereas on the junior high level, students given the same theme as the primary grades, will ponder the topic, begin to draw, change their mind or trend of thought and start over two or even three times and still be dissatisfied with the final product.

West employs the premise that:

General Education (history, science, language) is viewed by many art majors as a barrier to art study. Synthesis is a goal of art. For artists, borders must never be boundaries. Art requires the integration of ideas, not just the acquisition of skills. 

Students need to be continuously challenged to develop creativity that lies inherent in every individual just waiting to be released and embellished. Academics should enhance and be enhanced by artistic expression.

In the present study, emphasis is placed on the six year old child, when he makes his first representational attempts. Usually, children of this age are eager to explain and show what they have done without feelings of self-consciousness. A tree may be red, blue or yellow depending upon how the various colors appeal to the child. There are no set "color rules".

For contrast purposes the young adolescent is utilized. At this age, a youngster is aware of his surroundings, while at the same time, a target of self-criticism. Drawings are now either hidden away or attempts at cartooning predominate in the drawing realm. According to Eisner, this stage marks the end of art as a spontaneous activity.

Creative growth must be an integral part of any art program. If a student is to embrace spontaneity and freedom of expression, he may not allow the pressure to conform to adult standards, stifle the creative urge.

Studies have demonstrated that increased general experience in art enhance certain visual skills. Nodine's findings express his philosophy concerning the concept of visual perception:

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An individual's aesthetic judgments are based on the perceived structure among pictorial elements—lines, shapes, color, surfaces—and the interpreted narrative theme. Art training seems to teach viewers to appreciate painting, not because, in Levi Strauss' words, they are "good to see," but because they are "good to think." This suggests that beauty is less in the eye and more in the mind of the beholder.\(^3\)

As an incentive to art teachers to preserve and nourish the gift of creativity at the root of each child before us, we need to realize that:

The majority of children who are beginning to attend school will be in the stages of first representational attempts. It is therefore imperative that their introduction to art experiences be a meaningful one. A great deal of what goes on within school is dictated by the adult society in which we live; however, as we have discovered, the child is not a miniature adult nor does he think in adult terms. Art can provide the opportunity for growth in several vital areas and the opportunity for a child to investigate, invent, explore, make mistakes, have feelings of fear and hate, love and joy. Most essential, he should have all these experiences of living for himself, for himself as an entity—an individual who can, should, and will think for himself.\(^4\)

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Purpose

The purpose of this study is to investigate the students' creative expressions as influenced by formal education.

Problem

The problems of this study are to determine if there is a difference between the perception and use of color by students in primary grades with junior high students; secondly, if there is a difference displayed in drawing spontaneity related to age.
Chapter 2
Related Research
Introduction
The present study examines the influence of formal education on the flair for spontaneity expressed through color, shape, pattern, and texture as students progress from first to eighth grade. First, June MacFee’s theory shows how traditional factors affect a child’s performance in Art. This is followed by Victor Lowenfeld’s stages of development that emphasize the unfolding character of a child’s artistic capabilities and his/her ability to produce art. Finally, R.A. Salome’s research investigates the effect of perceptual training on student drawings at the elementary level.

Traditional Theory
June MacFee, in her study, delineates four factors or points that influence a child’s artistic expression. In his book, Eisner presents MacFee’s view of:

Four factors or points that affect the child’s performance in art: his readiness, his ability to handle information, the particular situation in which he is to work, and the delineation skills he possesses. ¹

MacFee’s perceptive-delineation theory stipulates that four factors come into play:

1. The readiness of the child. This includes factors such as the child’s physical development, his intelligence, perceptual development, response sets, and the cultural dispositions he has acquired.
2. The psychological environment in which he is to work. This includes the degree of threat or support existing in this environment and the number and intensity of rewards or punishments.
3. Information handling. This factor is affected by the child’s ability to handle detail, his intelligence, his ability to handle asymmetrical detail, and the categories he possesses for organizing perception.

4. Delineation skills. This includes the child's ability to manipulate media, his creative ability, and his ability to design qualities of form.  

**Stages of Artistic Development**

Victor Lowenfeld states a view of child's development that emphasizes the relationship between mental health, self-concept, and creativity. He presents the theory that creative work is stifled when a child is permitted to trace, copy, or use coloring books. He claims that a child's imagination and perceptual ability are developed through direct experience.

"through all his senses to the qualities of life."  

Lowenfeld emphasizes the unfolding character of children's development in six stages:

1. The scribbling stage (two- four years of age)  
2. The pre-schematic stage (four- seven years of age)  
3. The schematic stage (seven- nine years of age)  
4. The gang age (nine- eleven years of age)  
5. The stage of reasoning (eleven- thirteen years of age)  
6. The crisis of adolescence

The two stages of Lowenfeld's research applicable to the present study include: stage 2: the pre-schematic, when the child makes his first representational attempts and stage 5: the pseudo-naturalistic stage, which marks the end of art as a spontaneous activity.

**The Pre-schematic Stage**

By the age of six, shape and forms evolve into clearly recognizable forms with subject matter.

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3 Ibid., p. 89  
4 Ibid., p. 89
In drawings and paintings done by children of this age there is often little relationship between the color selected to paint an object represented. A man may be red, blue, green, yellow, depending upon how the various colors appeal to the child. To an adult these color relationships may seem a little odd. In fact, one study (Marshall, 1954) compared adult schizophrenics with normal five year olds and found the use of color with these two groups quite comparable.

For children of this age, the use of color can be an exciting experience. Although the child has no desire for exact color relationship, he can and does enjoy using color for its own sake. This is particularly true when using paint where rich masses of color can be painted quite fluidly. It is obvious that criticizing a child's use of color or pointing out the correct color for objects would interfere with his freedom of expression. Ample opportunity should be provided for the child to discover his own relationships with color, for it is through continued experimentation that a child establishes a relationship between his own emotional involvement with color and the harmonious organization of color on the page.\(^5\)

The Pseudo-Naturalistic Stage

This stage of development marks the end of art as a spontaneous activity and the beginning of a period of reasoning when children become increasingly critical of their own products. For some this means a change from unconsciously drawing what is known, to consciously relying upon what is seen. These attempts at naturalism assume great significance when we realize that this indicates the shift to adult modes of expression.

Just as the youngster has become more critically aware of his own actions, he has become more critically aware of his art products. Now the focus is on the end product itself: a picture has value or is good, not because of the effort, interest, or involvement that went into it, but because of the visual appearance of the product.\(^6\)


\(^6\) Ibid., pp. 301 and 303
The young teenager has an intuitive sense of color and design. The area of design is unlimited in its applications, and at this age an awareness of beauty and concern for ornamentation are developing.

Usually the schema that we have seen in earlier stages disappears; for some children the discrepancy between feeling themselves to be adults and seeing their art product as childish brings a shock.

We have emphasized that creative growth must be an integral part of the art program. This is especially true between the ages of twelve and fourteen. Here the child becomes much more critical of his own work; the pressure to conform to adult standards of behavior or to the standards of the crowd may work to stifle the creative urge.

This theory of Lowenfeld’s stages of development was demonstrated to this researcher recently during an art class when doodling was presented as a form of brainstorming. This technique was used to develop ideas of design while inspiring a freedom in drawing concerned with size and shape, not necessarily with detail. Students were encouraged to just “doodle” and create shapes and designs, letting their imagination and their pencil roam to create visual ideas on paper.

Following this activity, students were then introduced to gesture drawing and contour drawing—both means of developing form and shape. The first grade students (six year olds) were enthused and just enjoyed the “controlled scribbling” exercise and allowed their spontaneity to take over. The eighth graders (thirteen year olds) were definitely more intimidated and reluctant to experiment in this “controlled scribbling” effect of gesture drawing. One student sat looking at her paper for a whole five minutes trying to “decide”

8 Ibid., pp. 328 and 333
what to draw, while other eighth graders continuously checked to see what classmates were creating.

In support of Lowenfeld's theory of stages, it appears that most older students are locked into pre-conceived notions of what art should look like and are greatly influenced by peers' expectations and standards of being a good artist. In contrast, younger students are free to enjoy their uniqueness and individuality, concerned only with what looks good to them and unconscious of others' abilities, nor intimidated by their artistic achievements.

The Salome Study

R.A. Salome conducted a study entitled "The Effects of Perceptual Training Upon the Two-Dimensional Drawings of Children," in 1965. The problem of this study was to determine the effect of specific perceptual training on a child's inclusion of visual information in a drawing.

Three variables, as follows, were employed to analyze all drawings: communicative symbol, closure-clarity, and proportion. Communicative symbol focused on the degree to which a drawing was judged for the maximum amount of contour information relevant to the object drawn. Closure-clarity described the degree of organization achieved by enclosing the form and its component parts with line which described straight and curved edges relevant to the object. Proportion was concerned with height, width and size relationships of parts to the whole and how these were indicated and interrelated in the drawing. The researcher devised a fifteen point rating scale to measure the three dependent variables. A drawing could be assigned one to five points for each criterion, and a total score ranging from three to fifteen points. Because each of the three criterion measured contributed equally to the overall score, the total score served as data. This study was based upon theoretical concepts concerning the way students visually process information and apply perception of form to develop realism in a drawing.
Salome's population sample included two fourth grade and two fifth grade classes of public school students in Palo Alto, California. Ninety-eight students constituted Salome's study and classroom groups were randomly assigned to experimental and control sections. The final number of subjects in this study was determined by student attendance and participation in both pre-test and post-test drawing activities.

Salome's study consisted of a pre-test session, eight sequentially organized general class sessions, and a post-test section. The experimental groups received "demonstration-participation" exercises in locating, and differentiating between, points of maximal contour information prior to their drawing. The concepts stressed in these classes included the importance of 1) contour lines to describe the outer limits of objects and their component parts and 2) contour lines include points of information which if properly located and connected with line can be used to produce representational drawings. Contour lines were presented through black line drawings, silhouettes and yarn lines glued to various objects. The control sections were given conventional instruction in drawing the same objects presented in the experimental classes. No visual aids or instruction pertaining specifically to contour lines and points of information were included in these lessons. An analysis of covariance was applied to understand the differences between the experimental and control group achievement.

Salome found that the fourth and fifth grade subjects who received perceptual training to identify cues of contour change improved their artistic rendering abilities regarding: communicative symbol, closure-clarity and proportion.

Salome concluded that:

1. Perceptual training relevant to the utilization of visual cues located along contour lines does increase the amount of visual information fifth grade children include in drawings of visual objects as measured by the experimental criteria used in this study.
2. Perceptual training was the most significant factor in explaining the fifth grade experimental group's higher level of performance on the drawing tasks. Mixed results
obtained from the fourth grade analyses indicated that, while both pre and post tests scores affected the variability of scores, pre-test scores were the most significant factor in accounting for fourth grade group differences.

This study indicated that perceptual training relevant to representational drawing can increase the amount of visual information fifth grade children include in their drawings of visual stimuli. While the range and limitations of this kind of perceptual training need to be ascertained, future study may indicate a sequence of visual training experiences which would make art education more meaningful for children.

It appears that improved visual perception may not be a naturally occurring by-product of art activities, but a specific objective for which one must teach.\(^9\)

This study lends support to the researcher's premise by demonstrating the value of instruction in visual perception as a means to enhance spontaneity in younger students while developing a greater creative freedom in making older students more confident and less inhibited in their drawing. As a result of this experiment, it appears that relevant perceptual training may increase the elementary child's ability to render representational drawings.

The visual world is extremely complex and as students mature they tend to reduce the visual world to certain recognizable symbols. For example, if we examine the form and color of a tree, the student drawing should reflect the compositional characteristics of shape, pattern, texture and shading, which are essential to the execution of an authentically balanced work of art. Salome's study lends evidence to this premise as he states:

The psychology of perception suggests that learned habits of perception enable the individual to deal efficiently with what he sees, but such habits may result in presumptions about the environment which are maladaptive. If this is true, it may explain the child's persistence in clinging to a symbol for a given object, such as a tree.

despite the fact that his drawing does not relate much of the visual stimuli inherent in the object. 13

Lending support to Salome’s study is the advantage of a well-developed art program on the elementary level. In just four years of art training, there is a noticeable improvement in the students at Saint Katherine’s as they mature academically and artistically. Through training in perception, many students are now trying to be more innovative and creative as they attempt to make representational drawings incorporating form and shape through gesture drawing. Instead of drawing a sun with rays, students can now perceive and illustrate the sun as brightness shining through a darker background. A person with movement and form replaces the stick person of earlier days. A geometrically shaped tree (a circle and rectangle) now assume a pattern and texture to enhance the color.

Even though the dichotomy between learned and preconceived ideas of perception still fall along clean-cut lines with younger students more flexible and innovative and other students frozen in recognizable symbols, the gap is lessened through consistent application of the principles of artistic expression that comes with specific training on a child’s inclusion of visual information in a drawing.

Chapter 3
Design of the Study

Sample

The sample for this study consisted of eighth grade (n=30) and first grade (n=54) students attending a private elementary school in Eastern Pennsylvania.

Saint Katharine of Siena is a Kindergarten through Eighth Grade parochial school constituted of students belonging to nine parishes, three school districts, and three counties. The socioeconomic status of this primarily Caucasian school varies from upper to upper middle class.

Current student enrollment of St. Katharine’s is 290 of which less than 2% are minorities.

Procedure

The subjects of this research consisted of two intellectually heterogeneous first grade classes of 27 students each, constituting Group A, and one eighth grade class of 30 students in Group B, for a total of 84 students. All 54 students in first grade (Group A) were assembled in one first grade classroom rather than the Art Room. The researcher ascertained that the use of a classroom with single desks was more conducive to a testing experiment than the casual atmosphere generally present in the school Art Room. Each student was motivated to listen to and follow directions in the classroom situation and take the drawing assignment more seriously. The same procedure was followed in the eighth grade. Each group was required to complete a singular rendering of a tree in color. Beforehand, the teacher discussed the various types of trees along with their appearance during each of the seasons. Students then drew their favorite tree depicting a season of
their choice. All students were required to complete the rendering in a single class period. In lieu of a name, students used an established code to maintain anonymity and prevent bias in judging. Students papers were numbered and recorded prior to the testing session.

The required rendering of this investigation was completed using crayon on white construction paper. The designated dimensions of the drawing paper were limited to a 9" x 12" area. Crayons were selected as a drawing medium for this research investigation because of their versatility and familiarity with students of both age levels. They allowed expressiveness to be produced by all subjects regardless of their age or rendering abilities.

The image of a tree was selected by the investigator because it includes each of the following compositional characteristics: shape, pattern, texture, and shading. Incorporation of these four artistic elements are essential to the execution of an authentically balanced work of art. Upon completion of the assigned rendering, one teacher plus the investigator assessed the students drawings by means of a criterion referenced test developed by the investigator, using the Likert survey format. (See Appendix) The results of the rendering served as the criterion scores for this study.

**Analysis**

The data for this study was organized as a design for differences. The data was organized using a single factor design. A least squares ANOVA was calculated to compensate for the unbalanced design. Interjudge reliability was established as each student's drawing of a tree was assessed using The Visual Reception Assessment Form.
Chapter 4
Results and Interpretations

Interjudge Reliability

The interjudge reliability between judge 1 and judge 2 is .629. That is, there is approximately 38% in common between the two judges.

Table 1

Means, Standard Deviation, and ANOVA Summary for Students Spontaneous Use of Shape, Pattern, Texture, and Shading

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Grade</td>
<td>54</td>
<td>89.111</td>
<td>18.1222</td>
</tr>
<tr>
<td>Eighth Grade</td>
<td>30</td>
<td>80.833</td>
<td>21.533</td>
</tr>
</tbody>
</table>

ANOVA Summary

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1321.488</td>
<td>1</td>
<td>1321.488</td>
<td>3.512 n.s.</td>
</tr>
<tr>
<td>Error</td>
<td>30851.500</td>
<td>82</td>
<td>376.238</td>
<td></td>
</tr>
</tbody>
</table>

Spontaneity. Means, standard deviations and ANOVA summary data for the comparative assessment of student analytical abilities, regarding the identification of shape, pattern, texture, and shading to replicate a visual image are presented in TABLE 1. The researcher
failed to find a difference at the .05 level of confidence. The observed mean of the younger students, Group A, was higher than the observed mean of the adolescent student (Group B); a lower score is more desirable.

Interpretations

The interjudge reliability is adequate but not substantial. This result may indirectly cause concern regarding the validity of the rating scale as criterion measure.

For the analysis of student ability to visually discriminate and replicate elements of shape, pattern, texture, and shading when rendering a visual image of a tree, the researcher failed to find a significant difference between the groups. However, the probability of the mean differences that did occur was six in one hundred. Failure to establish a significant difference between the two groups therefore may have occurred for several reasons.

Visual interpretation of the shape, pattern, texture, and shading of the tree may have been influenced by the directives and motivation established beforehand. The idea of drawing the tree as a test and in the formal classroom situation, after discussing the size, shape, texture and color of trees throughout the various seasons, had a profound influence on the junior high students. Adolescents tend to want to please a teacher, therefore, they drew and colored the required assignment displaying great sensitivity to color and texture, as well as to pattern and shape. Mean scores may have been different if student renderings were replicated without the background discussion of trees in each season. The effect of teacher expectation may have provided a more accurate rendering as student awareness of the categories of shape, pattern, texture, and shading influenced their drawing presented as a “test” of rendering skills and application of color. Finally, because the validity of the criterion measure is questionable, it could be that a Type II error was committed.
Chapter 5

Summary and Conclusions

Purpose and Problems of the Study

The purpose of this study was to incorporate both perceptual and artistic elements in investigating the students’ creative expression as influenced by formal education.

The problem of this study was to determine if there was a difference between the perception and use of color by students in the primary grades as compared with junior high students.

Design and Analysis

The subjects of this research consisted of two classes of first grade students, numbering twenty-seven in each class, but who were tested simultaneously as one group (Group A). Group B consisted of one class of thirty eighth grade students. All students currently attend Saint Katharine of Siena School in Wayne, Pennsylvania.

The two groups, totaling eighty-four students, were each required to complete a single rendering of a tree in a season of their choice. The image of the tree was selected by the investigator because it embodied the compositional characteristics of shape, pattern, texture and shading.

Prior to the rendering, a common introductory lesson was presented to introduce each group to the concept and importance of art and to motivate the students to demonstrate previously taught techniques of grounding an object, dramatic use of color and shading and size/space relationship.

The completed renderings of both groups were evaluated by the researcher and a colleague qualified with a background in art education. To determine whether a substantial visual difference existed between the quality of color and the spontaneity of drawing
between the two sample groups, the educators rated each rendering according to the use of shape, pattern, texture, and shading characteristics in the completed drawings. The results of this assessment were used to determine if a substantial difference existed between the quality of the renderings of both groups based upon the ability to visually discriminate the four primary characteristics.

Results of the Study

The interjudge reliability was .629. For the analysis of student ability to visually discriminate and replicate elements of shape, pattern, texture, and shading when rendering a visual image, the researcher failed to find a significant difference between Group A and Group B.

Conclusions and Recommendations

On the basis of the data acquired from this research, it can be concluded that both perceptual and artistic elements are evident in students' drawings when education in these elements is an ongoing academic experience to which the students are exposed on a weekly basis.

Further research should be designed to investigate the degree to which the replication of the four primary characteristics of shape, pattern, texture and shading is influenced by a developed art program available to all students in the Kindergarten through eighth grade setting. Finally, investigations should be designed to assess the effect of perceptual training on student cognitive awareness of visual perception and its relative influence upon aesthetic decision making.
Appendix A

Visual Perception Assessment
References


Visual Perception Assessment

As a drawing assignment, students were required to render a tree in color. By examining the completed drawing before you, please indicate which number best describes your rating regarding the appearance of this student's rendering.

Please circle only one response for each statement using the following scale as a guide:
- Circle 1 if you strongly agree with a statement.
- Circle 2 if you agree with a statement.
- Circle 3 if you neither agree nor disagree with a statement.
- Circle 4 if you disagree with a statement.
- Circle 5 if you strongly disagree with a statement.

### Strongly Agree  |  Strongly Disagree

**Shape**
- Trunk is a sturdy vertical balance  |  1 2 3 4 5
- Branches create a horizontal dimension |  1 2 3 4 5
- Leaves add detail to design |  1 2 3 4 5
- Background-Tree is grounded |  1 2 3 4 5

**Pattern**
- There is a noticeable pattern in the rendering of the Trunk |  1 2 3 4 5
- Branches |  1 2 3 4 5
- Leaves |  1 2 3 4 5
- Background |  1 2 3 4 5

**Texture**
- Uses line variation to create texture
- Trunk |  1 2 3 4 5
- Branches |  1 2 3 4 5
- Leaves |  1 2 3 4 5
- Background |  1 2 3 4 5

**Shading**
- Uses color effectively by mixing and blending color to create contrast
- Trunk |  1 2 3 4 5
- Branches |  1 2 3 4 5
- Leaves |  1 2 3 4 5
- Background |  1 2 3 4 5