Composed Portraits

Content Analysis

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**Instructional Goal**

A picture is worth a thousand words is a statement we have heard many times. Determining what is defined as a well instructed portrait requires guidance. This instructional goal will be used to teach students and staff in a university setting. Given samples of portraits, the learner will be able to determine the components of well composed portraits. While a portrait may be perceived differently by different people, we will introduce several key concepts to better define the components to a well composed portrait.

**Target Population**

The setting for this training will be for college students and staff of the University of Hawai`i System who recently upgraded from point and shoot to digital Single Lens Reflex (SLR) cameras. The SLR is a type of camera which incorporates a viewing system where the subject is seen through the lens. Many students and staff share an interest in photography for artistic reasons as well as to support teaching. Today, with social networking, portraits are often posted online shortly after the pictures where taken.

**Instructional Analysis**

The analysis question is considered the second of Gagne's taxonomy of learning, or intellectual skills category. This instructional goal of identifying well composed portraits by college students or staff who have recently upgraded from point and shoot to digital SLR cameras requires the student to have certain entry level concepts mastered, the ability to follow rules and solve problems to perform this goal.
15. Given samples of portraits, the learner will be able to determine the components of well composed portraits.

1. Define subject
   - EL1: Ability to understand that a portrait commonly is the photograph of a human face depicting a mood

2. Determine subject for portrait

3. Define mood
   - EL2: Ability to comprehend different moods (i.e. happy, sad, romantic) are appropriate for different subjects

4. Determine appropriate background

5. Define natural lighting

6. Define artificial lighting

7. Determine lighting

8. Define rules of thirds

9. Define angle of subject

10. Determine composition

11. Define aperture

12. Define shutter speed

13. Define focus

14. Determine camera settings

15. EL4: Ability to understand composition is the arrangements of parts in relation to each other as a whole

16. EL5: Cognitive skill to understand settings on the camera
| Skills List: | 1. Determine subject for portrait  
2. Determine appropriate background  
3. Determine lighting  
4. Determine composition  
5. Determine camera settings |
|---|---|
| Subordinate skills: | 1. Determine subject for portrait  
 a. Define subject  
2. Determine appropriate background  
 a. Define mood  
3. Determine lighting  
 a. Define artificial lighting  
 b. Define natural lighting  
4. Determine composition  
 a. Define rules of thirds  
 b. Define angle of subject  
5. Determine camera settings  
 a. Define aperture  
 b. Define shutter speed  
 c. Define focus |
| Entry Level (EL) behaviors: | 1. Understanding that a portrait commonly is the photograph of a human face depicting a mood.  
2. Comprehend different moods (i.e. happy, sad, romantic) are appropriate for different subjects.  
3. Understand adequate light is necessary for portraits.  
4. Understand composition is the arrangements of parts in relation to each other as a whole.  
5. Understanding that camera settings are important. |
**Instructional Strategy**

**Instructional Goal:** Given samples of portraits, the learner will be able to determine the components of a well composed portrait.

<table>
<thead>
<tr>
<th>SKILL</th>
<th>PERFORMANCE OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 1</td>
<td>Distinguish a mood of a human face. Given a group of four images, the learner will choose the image of a human face depicting a mood.</td>
</tr>
<tr>
<td>EL 2</td>
<td>Distinguish moods for different subjects. Given a group of four images, the learner will choose the image that best depicts the appropriate mood.</td>
</tr>
<tr>
<td>EL 3</td>
<td>Distinguish adequate lighting. Given a group of four images, the learner will choose the image that best depicts adequate lighting.</td>
</tr>
<tr>
<td>EL 4</td>
<td>Distinguish components of composition in relation to a whole. Given four possible definitions, the learner will choose the answer that best describes the term “composition”.</td>
</tr>
<tr>
<td>EL 5</td>
<td>Distinguish settings on a camera. Given the settings on the camera, the learner will use cognitive skills to best determine settings on the camera to produce a well defined portrait.</td>
</tr>
<tr>
<td>1</td>
<td>Define subject. Given four possible definitions, the learner will choose the answer that best describes the term “subject”.</td>
</tr>
<tr>
<td>2</td>
<td>Determine subject for portrait. Given four images, the learner will determine the image that best represents a subject for a portrait.</td>
</tr>
<tr>
<td>3</td>
<td>Define mood. Given four possible definitions, the learner will choose the answer that best describes the term “mood”.</td>
</tr>
<tr>
<td>4</td>
<td>Determine appropriate background. Given four images, the learner will determine the image that best represents an appropriate background.</td>
</tr>
<tr>
<td>5</td>
<td>Define natural lighting. Given four possible definitions, the learner will choose the answer that best describes the term “natural lighting”.</td>
</tr>
<tr>
<td>6</td>
<td>Define artificial lighting. Given four possible definitions, the learner will choose the answer that best describes the term “artificial lighting”.</td>
</tr>
<tr>
<td>7</td>
<td>Determine lighting. Given four images, the learner will determine the image that best represents a subject for a portrait.</td>
</tr>
<tr>
<td>8</td>
<td>Define rules of thirds. Given four possible definitions, the learner will choose the answer that best describes the term “rules of thirds”.</td>
</tr>
<tr>
<td>9</td>
<td>Define angle of subject. Given four possible definitions, the learner will choose the answer that best describes the term “angle of subject”.</td>
</tr>
<tr>
<td>10</td>
<td>Determine composition. Given four images, the learner will determine the image that best represents proper composition in relation to the subject.</td>
</tr>
<tr>
<td>11</td>
<td>Define aperture. Given four possible choices, the learner will choose the answer that best describes the term “aperture”.</td>
</tr>
<tr>
<td>12</td>
<td>Define shutter speed. Given four images, the learner will choose the answer that best defines the term “shutter speed”.</td>
</tr>
<tr>
<td>13</td>
<td>Define focus. Given four possible choices, the learner will choose the answer that best describes the term “focus”.</td>
</tr>
<tr>
<td>14</td>
<td>Determine camera settings. For each camera setting, given four images, the learner will choose the image that best depicts the proper setting.</td>
</tr>
<tr>
<td>15</td>
<td>Given samples of portraits, the learner will be able to determine the components of a well composed portrait. The learners will determine from a set of images the correct components of a well composed portrait.</td>
</tr>
</tbody>
</table>
**PRE-INSTRUCTIONAL ACTIVITIES**

**Motivation:**
Show exemplary examples of well composed portraits for student motivation.

**Objectives:**
Instruction through paper format will be provided by instructional designers to students and staff of the University of Hawai`i System to define the basic camera setting on a SLR camera. They will be able to: 1) Define aperture 2) Define shutter speed; and 3) Define focus. Given a well defined module, students and staff will know the concepts of determining camera settings.

**Prerequisite Skills:**
Students and staff will have these five entry level skills. EL1: Understand a portrait is a photograph of a human face depicting a mood. EL2: Comprehend moods. EL3: Know adequate light is needed. EL4: Understand composition. EL5: Understand the settings of the camera.

**ASSESSMENT**

**Pre-test:**
Prior to the beginning of the module, students and staff will be given a pre-test related to the objective.

**Practice Tests:**
During the module, a practice test will be provided to assess the progress of students and staff.

**Post-test:**
After the completion of the module, students and staff will complete a paper format evaluation to determine if they have achieved the objective.

**FOLLOW-THROUGH ACTIVITIES**

**Memory Aids:**
Depict examples of good and bad portraits.

**Transfer:**
At the completion of the module students and staff should apply skills learned toward shooting a well composed portrait.
# Sequence and Clustering of Objectives

<table>
<thead>
<tr>
<th>CLUSTER</th>
<th>OBJECTIVES</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1: Subject and Background</strong></td>
<td>Minutes 1. Define subject 2. Determine subject 3. Define mood 4. Determine appropriate background</td>
<td>Instructional Time: 20</td>
</tr>
<tr>
<td><strong>Section 2: Lighting</strong></td>
<td>Minutes 5. Define natural light 6. Determine artificial light 7. Determine lighting</td>
<td>Instructional Time: 30</td>
</tr>
</tbody>
</table>
**Brief description of lesson:**
Given samples of portraits, the learner will be able to determine the components of a well composed portrait.

<table>
<thead>
<tr>
<th>(1) <strong>Gain attention:</strong></th>
<th>Lead in statement/comic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) <strong>Inform learners of the objective:</strong></td>
<td>A section on the lesson plan describing the purpose and process of the module will be provided for the learner at the beginning of the lesson.</td>
</tr>
<tr>
<td>(3) <strong>Stimulate recall:</strong></td>
<td>Learners will be presented with a number of questions with images in order to help them think about what they already know in relation to the composition of portraits.</td>
</tr>
<tr>
<td>(4) <strong>Present stimulus materials:</strong></td>
<td>Learners will be presented with information for each objective as they progress through the module.</td>
</tr>
<tr>
<td>(5) <strong>Provide learner guidance:</strong></td>
<td>Learners will be provided with examples (images) for each step as they progress through the module.</td>
</tr>
<tr>
<td>(6) <strong>Elicit performance:</strong></td>
<td>Learners will have opportunities for each step to practice.</td>
</tr>
<tr>
<td>(7) <strong>Provide feedback:</strong></td>
<td>Feedback will be provided with the practice so that learners can self-check their work as they go.</td>
</tr>
<tr>
<td>(8) <strong>Assess performance:</strong></td>
<td>Learners will be given a post test to determine whether they have successfully achieved the objective.</td>
</tr>
<tr>
<td>(9) <strong>Enhance retention and transfer:</strong></td>
<td>Learners will have an opportunity to apply their knowledge to composed a well taken portrait.</td>
</tr>
</tbody>
</table>
Content Presentation and Learner Participation

**SKILL:** Define aperture

**OBJECTIVE:** Given four possible choices, the learner will choose the answer that best describes the term “aperture”.

### CONTENT PRESENTATION

**Information Presentation:**
The main function of a camera lens is to collect light. The aperture of a lens is the diameter of the lens opening and is usually controlled by an iris. The larger the diameter of the aperture, the more light reaches the film / image sensor.

Aperture is expressed as f-stop, e.g. f/2.8 or f/2.8. The smaller the f-stop number (or f-value), the larger the lens opening (aperture). In practice, unless you are dealing with a fixed-aperture lens (many simple point-and-shoot cameras have only one fixed aperture), the aperture of a lens is usually expressed as a range of f-stops.

### Examples:

**Aperture and Depth of Field (DOF)**

<table>
<thead>
<tr>
<th>Shallow DOF</th>
<th>Great DOF</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
</tr>
</tbody>
</table>

**Note how the use of a large aperture (small aperture value) throws the flowers in the background out of focus. Focus has to be precise.**

**Using a small aperture (large aperture value) extends the DOF from the foreground all the way to the background.**

### Non-Examples:

![Image](image3)  
In this first example, the aperture was set to f/5.6. A smaller aperture of f/8 or f/11 would have allowed both fish to be in focus.

![Image](image4)  
In this second example, an f stop of f/8.0 was used. Once again, a larger f-stop of f/11 would have put more of the fish in focus in this picture.

### Pre-test & Embedded: Question:

Which lens has a larger opening (aperture)? One with an aperture of:

A. f/1.8 *  
B. f/2.8  
C. f/5.6  
D. f/8

**Feedback**

Answer A is correct. Remember the smaller the f-stop, the larger the aperture.

### Post-test Question:

Assuming the shutter speed does not change, which of these f-stop settings exposes the film to the most light?

A. f/2.8 *  
B. f/5.6  
C. f/8  
D. f/11
**SKILL:** Define shutter speed

**OBJECTIVE:** Given four images, the learner will choose the answer that best defines the term “shutter speed”.

### CONTENT PRESENTATION

**Information Presentation:**
Shutter speed defines the amount of light that hits the digital sensor. Shutter speed defines movement on the picture, for example the blurred image of a bird flying by, verses a faster shutter speed will freeze fast moving subjects.

### Examples:
A shutter speed set to 30\(^{th}\) of a second for jumping dolphins, would show a blurred image. A fast shutter speed of 500\(^{th}\) of a second would capture the moving object better. A properly exposed picture requires a balance of the correct shutter speed and appropriate aperture setting to get the correct image brightness.

### Non-Examples:
The following are non-examples as they demonstrate non-correct shutter speed settings.

The image on the right shows the jumper blurred, a faster shutter speed or tracking with the jumper (following the jumper with the camera) would have made the subject sharper in the picture.

### Pre-test Embedded:
Given these four images which one best defines the correct shutter speed?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Blurry image, slow shutter speed</td>
<td>B.* Shutter speed correct, image correctly exposed</td>
<td>C. Blurry image, overexposed</td>
<td>D. Blurry image, underexposed</td>
</tr>
</tbody>
</table>

**Feedback**
A. Blurry image, slow shutter speed  
B. Correct, clear subjects  
C. Blurry image, overexposed  
D. Blurry image, underexposed

### Post-test
For this image, which answer best defines correct shutter speed.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.* Shutter speed correct, image correctly exposed</td>
<td>B. Shutter speed too slow, image blurred</td>
<td>C. Shutter speed too fast, overexposed</td>
<td>D. Shutter speed too slow and under exposed</td>
</tr>
</tbody>
</table>
## Content Presentation and Learner Participation

**SKILL:** Define focus

**OBJECTIVE:** Given four possible choices, the learner will choose the answer that best describes the term “focus”.

### CONTENT PRESENTATION

**Information Presentation:** Focus describes the point at which the image in the camera view finder is sharp and easily viewable. Non-focused areas would be items before or behind the focused image that are fuzzy or out of focus.

### Examples:

<table>
<thead>
<tr>
<th>Image 1</th>
<th>Image 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="fish.jpg" alt="Example Image 1" /></td>
<td><img src="eel-focused.jpg" alt="Example Image 2" /></td>
</tr>
</tbody>
</table>

In the above example, the photo depicts fish in a coral reef. All of the image are in focus. In the above example, the photo shows the head of an eel as focused. The body is not in focus.

### Non-Examples:

<table>
<thead>
<tr>
<th>Image 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="non-focused.jpg" alt="Non-Example Image" /></td>
</tr>
</tbody>
</table>

In the example on the left, the image depicts a non-focused photo.

### Pre-test & Embedded:

For the image of the boat, which letter best depicts being clearly defined as focused?

A.*  
B.  
C.  
D.  

### Feedback

A. Correct answer  
B. Non-focused  
C. Non-focused  
D. Non-Focused

### Post-test

Select the picture of the eel that is best focused, A*, B, C or D.

A.*  
B.  
C.  
D.