



European IT Certification Curriculum Self-Learning Preparatory Materials

EITC/CG/ADPD
Artistic digital portrait drawing



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EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: INTRODUCTION TO COLORS AND TONES IN DIGITAL PORTRAITS****TOPIC: SKIN TONES**

When creating digital portraits, the rendering of skin tones is a common challenge. A frequent beginner's approach involves selecting a base skin color and then simply adjusting its value—making it lighter for highlights and darker for shadows—while keeping the hue and saturation unchanged. This method often results in flat, lifeless skin that lacks the vibrancy of real human skin.

To achieve more realistic and dynamic skin tones, it is important to adjust not only the value but also the hue and saturation. For highlights, one might start with a lighter, less saturated version of the base color. As the form transitions into midtones and shadows, the hue can be shifted slightly, often toward warmer (more red or orange) colors, and the saturation can be subtly increased. For the darkest shadows, these changes can be even more pronounced—darker values, richer saturation, and a further warmed or cooled hue, depending on the desired effect.

Conceptually, one way to visualize skin is as a red, opaque object (representing muscle tissue) coated with a thin, translucent layer that gives the skin its characteristic color. Depending on lighting and anatomical features, the underlying red tone may show through more or less. While this is a simplification and omits the complexity of actual skin anatomy, such as fat, veins, and connective tissue, it serves as a useful model for artists.

While warming the hue in shadow areas is a common technique, it is equally valid to shift toward cooler hues instead. The key is consistency across the portrait, ensuring that hue shifts are harmonious throughout the piece. This method can be applied equally to imaginative skin colors, such as pink, blue, or green, provided that value, saturation, and hue are varied together to maintain depth and interest.

When constructing a portrait, consider the behavior of light on the skin. For example, a dark brown base tone can be modeled with a top light source by using a lighter, cooler highlight that is less saturated, but not drastically blue or cold—just cooler than the base. Subtle shifts in hue and saturation, rather than extreme changes, are often sufficient to achieve convincing lighting effects.

Even simple shapes and forms can quickly take on a lifelike appearance when the principles of color variation are applied. Additional effects such as secondary light sources (ambient or colored light), specific facial features, hair, blush, and detailed textures like wrinkles and pores can then be layered in for further realism or stylization, as desired.

In stylized or cartoony portraits, the rendering of skin may be less intricate, but the foundational understanding of how value, saturation, and hue interact remains relevant. Mastery of these principles allows for flexibility, whether aiming for realism or a more graphic style.

Effective digital rendering of skin tones requires attention to three attributes: value, saturation, and hue. Consistently varying these parameters, rather than relying solely on value shifts, results in more vibrant and believable skin in digital portraiture.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: FACIAL FEATURES IN PORTRAITS****TOPIC: EYES**

The eye is a highly intricate component in digital portrait drawing due to its complex anatomy and the multitude of smaller elements that compose it. Structurally, the eye consists of the eyeball housed within the eye socket, accompanied by the upper and lower eyelids, the tear duct area, and connective regions interfacing with the brow, cheekbone, and the side of the nose. For effective depiction, it is advantageous to dissect these elements into manageable parts.

The eyeball itself can be visualized as a sphere situated within the orbital cavity. The eyelids, both upper and lower, wrap around the eyeball, forming distinct planes that conform to the spherical shape. When constructing these forms, it is important to pay attention to the thickness of the eyelids, particularly evident on the lower eyelid, where it may appear as a small shelf-like structure. This thickness can vary between individuals and may be more prominent or subtle depending on lighting and anatomical variation, but should always be acknowledged in the drawing process.

Eyelashes grow from the border where the eyelid meets the eyeball, not from the eyelid surface or the shelf created by the eyelid thickness. The lash line follows the contour of the eyelid margin, which is not perfectly straight but should be carefully observed and rendered close to its anatomical path.

Surrounding the eye, particular attention should be paid to the plane connecting the eye and the brow. This area can overlap the upper eyelid to varying extents, sometimes concealing the upper eyelid entirely or partially, depending on facial structure and the chosen viewpoint. Accurately capturing the interplay between these regions is vital for a realistic representation.

A practical approach to painting the eye involves beginning with basic shapes, such as an eyeball covered by the contiguous forms of the eyelids. Starting with darker values and layering lighter tones can facilitate an organic and dimensional appearance. Initial shapes may be rough or imprecise, but refinement and definition occur progressively through the painting process. This method often includes indicating the shadow cast by the upper eyelid onto the eyeball, which alludes to the eyelid's thickness even if not directly visible from the chosen perspective.

When working on eyes within the context of larger compositions, such as full or half-body portraits, the level of detail should be adapted to the visible scale and the overall lighting scheme. If the focal point is not the eye, or if lighting or reflections obscure fine details like the iris, it is efficient to simplify the rendering in these areas, avoiding unnecessary labor on features that will ultimately be less noticeable.

It is recommended to plan the painting and remain mindful of the final composition, focusing effort on details that will be visible and contribute meaningfully to the result. Avoid expending resources on elements that may be obscured or irrelevant to the viewer.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS

LESSON: FACIAL FEATURES IN PORTRAITS

TOPIC: NOSE

The nose, as a central and defining element of the human face, can be analyzed and constructed through a simplified geometric approach. When deconstructing the nose to its basic structure, it can be envisioned as a box with clearly defined planes. These include a front plane, two side planes, and a bottom plane. The top plane is not distinctly present as it merges seamlessly with the brow region. The appearance and prominence of these planes will vary depending on the perspective from which the nose is viewed. For instance, foreshortening can make the top plane appear thinner and the side planes seemingly wider.

Examining the bottom aspect of the nose reveals a division into three main components: the septum, located centrally, and the wings—commonly known as the alae—on either side. The base of the nose is not a straight horizontal line but is characterized by subtle plane changes, where the septum sits slightly lower than the wings. This nuanced elevation difference is subtle yet important for realistic representation. While this description applies to an archetypal nose, it is essential to recognize the wide variability of nasal shapes, which can be intentionally modified in portraiture to achieve likeness or specific stylistic effects. Mastery of these fundamental structures serves as an important foundation in the study of facial features.

The upper portion of the nose comprises the glabella, a significant form that creates the connection between the nose and the brow. The glabella typically begins at the brow line and descends toward the bridge of the nose. Its lower edge often aligns with the upper margin of the eyelids, though natural variation exists. The glabella generally tapers from a broader upper section to a narrower lower section. This region also possesses side planes, establishing a repeating rhythm: side plane, top plane, side plane.

An ASCII representation to visualize the simplified planar structure of the nose:

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_____
/\
/\
| (G) | ← Glabella (G)
| Front | ← Front plane
/| \
/| | \
/_|_____|\
| (B) | ← Bottom plane (B), showing the septum and wings

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In digital painting, the construction of the nose may begin with loosely placed color masses, later refined and blended to define form and volume more accurately. There is flexibility in workflow; some artists prefer more structured sketching at the outset, while others may work more freely, building up the image in successive layers. Attention to color is particularly important in rendering noses. Warm colors such as pinks, reds, and oranges are often used, reflecting the tendency of the nose to appear flushed due to environmental effects or physiological responses. However, the extent of warmth applied should be adjusted based on desired realism and stylistic intent.

In addition to warm tones, the inclusion of cooler hues—such as desaturated blues or purples—around the bridge of the nose, especially near the inner corners of the eyes (tear duct area), can enhance the naturalism of the portrait. These cooler tones should be applied subtly to avoid disrupting color harmony or unintentionally exaggerating features such as under-eye shadows. Low-saturation colors and reduced brush opacity are effective for this purpose.

When rendering the bulb of the nose, it is common to observe that it is slightly darker than adjacent facial regions. This quality provides an opportunity to place highlights strategically, adding convincing specular effects that suggest smooth or oily skin. Even with sharper nasal features, highlights on the bulb enhance the perception of form and texture without adverse visual impact.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: FACIAL FEATURES IN PORTRAITS****TOPIC: LIPS**

In artistic digital portrait drawing, the depiction of lips requires careful consideration of their anatomical structure, placement, color, texture, and interaction with light. Understanding these aspects contributes to creating lifelike and expressive portraits.

The structure of the lips and their surrounding region is three-dimensional and not a flat surface. The mouth protrudes from the facial plane, curving outward and then receding at the edges. This curvature is especially noticeable when the head is viewed from an angle. The region can be divided into distinct areas: the region above the upper lip (philtrum), the upper lip itself, the lower lip, and the region below the lower lip (mentolabial sulcus and chin). Each of these zones has its own sense of volume and directionality, contributing to the overall roundness of the mouth area. These boundaries are not defined by straight lines, but rather by subtle, curved transitions.

The central plane of the face, starting at the center of the nose, expands outward as it moves toward the upper lip, then converges closer to the midline at the lower lip, before expanding again at the base of the lower lip. This rhythmic alternation of expansion and contraction imparts a dynamic flow to the mouth area.

A notable feature in the upper lip is the cupid's bow, characterized by a gentle dip and a subtle thickness that adds depth and contour to the lip's form. Additionally, there is a small plane on the upper lip that faces upwards, often catching extra light. This plane is sometimes overlooked but plays a role in rendering the lip's three-dimensionality.

The placement of the mouth is typically just above the halfway point between the base of the nose and the bottom of the chin, situated in the lower third of the facial structure. For width, a practical guideline is to make the mouth slightly wider than the width of the nose above it.

When creating digital portraits, it is often beneficial to colorize the line work of the sketch. Using a deep, dark, saturated tone—preferably from the red family—integrates the line work more harmoniously with the colored layers, avoiding the harshness and muddiness that black lines can introduce.

The depiction of teeth should avoid using pure white tones. Teeth generally appear more natural when rendered in values similar to the surrounding skin, but slightly more desaturated and yellowish. This approach ensures that the teeth blend smoothly with the overall painting, enhancing realism.

Lips exhibit a unique texture that distinguishes them from the surrounding skin. They are not perfectly smooth, and indicating subtle texture can enhance realism. The main value (brightness) of the lips is generally darker than that of the adjacent skin. Selecting a lip color that is only slightly darker and shifted towards red, while avoiding tones too close to the skin value, prevents an unrealistic "concealer lips" effect.

Lips often appear more moist than the surrounding facial areas, resulting in higher reflectivity. This increased specular reflection can be emphasized with highlights, but their intensity must correspond to the lighting conditions in the scene. When the lips are in shadow or the environment is dimly lit, highlights should be subdued or minimized. The placement and intensity of highlights should be consistent with the overall light direction and environment. Other facial features, such as the tip of the nose or cheeks, may also receive highlights, but these must be adjusted according to the specific lighting scenario to maintain visual coherence.

While general principles provide a foundation for rendering lips, each portrait demands context-sensitive decisions based on the character's pose, expression, and lighting. Adapting techniques to the particular requirements of each piece ensures accurate and expressive results.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: FACIAL FEATURES IN PORTRAITS****TOPIC: EARS**

Ears are a complex yet often overlooked element in artistic digital portrait drawing. Their proper depiction can substantially enhance the realism and expressiveness of a portrait, especially when illustrating younger subjects where other facial elements bear fewer distinguishing marks such as wrinkles. The anatomy and placement of ears present a range of variations, offering flexibility to the artist. Ears differ in shape and size, with some projecting noticeably from the head while others lie almost flat. Typically, the front plane of the ear is slightly rotated forward, and most ears protrude more at the top than at the bottom, resulting in a subtle angle when viewed from the front.

The placement of the ear serves as a useful indicator for the tilt of the head. In a straight-on (frontal) view, the ear is generally positioned midway between the top of the brow and the bottom of the nose. As the head tilts downward, the ears appear to move upward in the visual field; conversely, tilting the head upward causes the ears to appear lower.

The structure of the ear can be simplified through visual analogies to aid in drawing. A common approach is to conceptualize the ear's outer rim as a question mark "?", where the main curve forms the helix (the outer rim) and the dot signifies the earlobe. This analogy captures the top, outer, and bottom contours of the ear. Internally, the ear features a structure resembling the letter "Y", representing the antihelix and its bifurcation. The upper region of this "Y" shape is often in shadow and sometimes appears quite flat, making it less prominent in some individuals. Another significant anatomical feature is the tragus, a small protrusion at the entrance to the ear canal.

For artists focused on stylized or less detailed portraits, simplification of these forms is common and acceptable, but it is important to maintain a consistent level of detail throughout the entire artwork. Rendering certain features, such as eyes, nose, or lips, in a hyper-realistic manner while leaving ears or other elements overly simplified can result in a visually inconsistent final piece.

When selecting colors for painting ears, it is important to note that ears typically exhibit a reddish or pinkish hue due to their vascularity and thin skin. Enhancing this coloration, particularly at the top of the ear and sometimes on the earlobe, can add vibrancy and realism. This effect can be achieved by layering semi-transparent glazes of red or pink with a soft-edged brush, creating gradual gradients that mimic the natural coloration of the skin.

The workflow for painting ears, as with other features, offers flexibility. One can begin by blocking in the darkest and lightest values, gradually blending these with midtones, or start with a midtone and sequentially add shadows and highlights. Maintaining a balanced progression across the entire portrait helps ensure consistency, although some artists may prefer to refine specific features before others. Using photographic references or mirrors can assist in accurately determining the ear's placement and angle, especially for complex head poses.

Experimentation with techniques and workflows is encouraged, as no single method is universally superior. The key is to achieve a harmonious and consistent rendering that complements the overall style of the artwork.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: FACIAL FEATURES IN PORTRAITS****TOPIC: HAIR**

The digital painting of hair in artistic portraits involves a systematic approach that balances simplicity with the potential for further detail. A common method is to begin by blocking in the larger shape of the hair using either the darkest color or, less frequently, a middle tone. This foundational shape is established with a round brush featuring slightly soft edges—neither fully hard nor airbrush-soft—to maintain the clarity of the hair mass. The initial color should be fairly dark, as subsequent layers will build up lighter tones to simulate depth and volume.

Work is typically performed on separate layers to keep the elements organized and facilitate corrections. For instance, one layer is placed behind the character for the hair at the back, and another above for hair in the foreground. This separation prevents accidental overpainting on key facial or body features and allows for more flexible editing. As the painting progresses, these layers may be merged to reduce complexity, but only after ensuring the desired effect is achieved.

Alpha lock or clipping masks can be employed to constrain the painting area, preserving clean edges and preventing color spillover. While alpha lock is suitable for smaller projects, clipping masks are often preferred in larger compositions for their ability to separate and manage complex elements efficiently.

The process advances from broad masses to smaller details. Large hair shapes are refined, and lighter colors are layered to define major strands. At this stage, the illusion of depth is enhanced by indicating where strands overlap and cast shadows on those beneath them. Continual color picking and blending between darker and lighter shades help achieve the natural variation found in actual hair.

Tools such as the liquify function, available in most digital painting software, can be used to adjust the shape of the hair efficiently. It allows for repositioning and reshaping strands without the need for extensive erasure and repainting, thus preserving the integrity of the underlying structure.

When refining, small, individual strands and flyaway hairs are added using smaller brush sizes and varying opacity. These delicate details are best placed on separate layers so they can be erased or manipulated independently. This is particularly useful if a strand needs to be removed or repositioned without disturbing the rest of the artwork. Additionally, this technique allows for the use of blending modes—such as multiply for casting soft hair shadows on the face—which enhances realism by simulating the way light interacts with semi-transparent hair.

It is also important to maintain consistency in the color relationships between hair and other features, such as eyebrows. Adjusting eyebrow color with a soft brush on a separate layer and experimenting with blending modes can ensure harmony across the portrait.

Throughout the process, frequent zooming in and out is recommended to monitor the overall balance and prevent overworking localized areas, which could disrupt the cohesion of the hairstyle. The final touches involve adding thin, light strands, primarily over the darker regions, to impart a sense of realism without overwhelming the underlying structure. Care must be taken not to add excessive detail in these final strokes, as this could obscure the larger forms and detract from the overall composition.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: WORKING WITH REFERENCES****TOPIC: REFERENCES**

When creating digital portrait art, the selection and use of reference images play a significant role in achieving accuracy and a convincing outcome. For individuals at the initial stages of learning to draw or paint human faces, it is advisable to select reference photographs that display clear structure. The most significant aspect of a useful reference at this stage is strong, directional lighting. This allows for clear observation of transitions between light and shadow, making it easier to discern the three-dimensional form and the various planes of the face. Such references provide the necessary information to avoid flatness in the rendered portrait.

It is recommended to avoid using photographs with poor lighting, such as those where the lighting is so diffuse or overexposed that details of value and color variation are lost. For beginners, these images lack sufficient visual data needed for effective study. Only advanced practitioners, who have developed the ability to mentally reconstruct the facial structure and lighting, might benefit from such challenging references, for instance, when working from low-quality client-provided images.

When selecting a reference for practice, choose photographs where shadows and value transitions are clearly visible across the face. This ensures there is enough information to guide the process. Using free stock sources, such as Pexels, is a practical approach to obtaining suitable images.

In preparation for painting, place the reference image on the digital canvas and duplicate it. Lock the layer and fill the background with a neutral color to set up a working environment. For those beginning their studies, it is helpful to maintain the reference photo and the working painting at the same size. This facilitates accurate comparison of positive and negative shapes, aiding proportion and structure observation.

To reduce distraction from excessive detail in the reference, apply a blur or a suitable filter in image editing software. This simplification allows focus on the main shapes and large value masses. It is advisable to keep the original reference on a separate layer for later use. The same visual simplification can be achieved in life drawing by squinting the eyes to blur out unnecessary detail.

During the block-in or underpainting stage, select base colors and focus on capturing major shapes, proportions, and angles. It is not necessary to begin with a detailed sketch; direct work with shapes is effective. While color picking directly from the reference is a common practice, it is important to analyze the selected colors, observing relationships such as saturation and temperature differences between shadows, midtones, and highlights. For example, one should consider whether the shadows are warmer or cooler, or more or less saturated than the surrounding tones.

If proportional errors are detected in the painting, especially during the early, loose stages, simply paint over them as needed. For paintings at a more advanced stage, the liquify tool can be used to adjust shapes without having to redo the entire area.

A practical method to check accuracy is to use a grid. Create a new layer atop both the reference and the painting, and draw a few horizontal and vertical lines across significant landmarks, such as the top of the forehead or the tip of the nose. These guides do not need to be evenly spaced and serve as visual aids for alignment rather than measurement.

While it is common to work on a single layer during studies, duplicating the base layer before beginning detail work provides a safeguard, allowing for easy reversal if undesirable changes are made. Once the major structure is established, reliance on the reference can be reduced, and the artist may proceed with interpretation or stylistic adjustments. At this stage, one may choose to replicate the reference closely or infuse the work with personal expression.

For more advanced practice, using multiple references is encouraged. For instance, one might use distinct photographs for features such as eyes or irises, or for specific elements like eyelashes, clothing, or lighting scenarios. This approach allows for greater flexibility and creativity in constructing original compositions.

Additionally, three-dimensional models are valuable resources for reference. Basic forms can be created in 3D

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software such as Blender, which is freely available and well-supported. These virtual models can be rotated and lit from any angle, eliminating the need to search for specific photographic angles and lighting conditions. Even simple, rudimentary models suffice for understanding form and lighting.

The use of reference materials—whether photographic or three-dimensional—should always be accompanied by thoughtful analysis. By systematically observing structure, lighting, color relationships, and by employing practical tools such as grids and layers, one can develop both technical skill and artistic interpretation in digital portrait drawing.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: SCULPTING APPROACH IN DIGITAL PORTRAITS****TOPIC: SCULPTING**

The sculpting approach to digital portrait drawing focuses on a process akin to shaping a malleable material, such as clay, rather than relying on rigid outlines or frames. In this method, the artist emphasizes the continuous adjustment and refinement of forms, working with broad planes and shapes before refining secondary and smaller elements. This approach offers greater flexibility, allowing for the repositioning and reshaping of elements without the constraints imposed by detailed linework.

The process typically begins without concern for accurate outlines or even recognizable facial features. Instead, the artist lays down large blocks or "blobs" of color to represent the main masses and forms observed in a reference image, mirror, or one's imagination. The focus is on establishing the primary volumetric relationships—such as the placement of the head, the orientation of the face, and the fundamental shapes that define the portrait's structure. These forms are freely adjusted as needed, enabling the artist to maintain compositional harmony without the need to erase or redraw intricate linework.

As the process evolves, the artist gradually introduces secondary shapes, such as the indication of eyes or the suggestion of a nose, but avoids excessive detail until the foundational forms are solidified. This incremental approach ensures that the overall structure remains coherent and that changes can be made efficiently. It is advisable not to rush into high-detail rendering before the main shapes are well established, as this can result in visual inconsistency and confusion, especially in the early stages.

In the case of elements like hair, it is often beneficial to reserve a separate layer for these features. This allows the artist to make significant modifications or reposition hair without affecting the underlying portrait. However, this practice may vary according to individual preference and workflow efficiency. For other overlapping elements, such as a hand placed in front of the face, the necessity of using separate layers is less pronounced, depending on the artist's tolerance for merging forms.

A critical consideration in the sculpting approach is the treatment of light and shadow. To facilitate the illusion of three-dimensionality, the artist must determine the direction and quality of the light source early in the process. Beginners are advised to select simple lighting scenarios to avoid unnecessary complexity. The rendering typically starts with a middle tone, upon which highlights and shadows are gradually built. This sequence mirrors traditional sculpting, where the artist pushes and pulls forms to model the surface.

The focus throughout remains on perceiving and representing forms rather than fixating on the identity of the subject. The goal is to convey the illusion of volume and depth, achieved by careful observation of how shapes turn in space and how light interacts with these surfaces. Incorporating deep cast shadows in strategic areas can enhance the sense of contrast and dimensionality, which is often sought in portraiture.

As a preparatory exercise, artists may benefit from practicing the sculpting approach in grayscale, omitting color to concentrate solely on value relationships and the modeling of form. This foundational training helps establish a strong sense of volume and prepares the artist for the integration of color at a later stage. Once comfortable with this method, color can be gradually introduced in accordance with the artist's readiness and creative objectives.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: RENDERING****TOPIC: SMART RENDERING**

In the context of artistic digital portrait drawing, rendering refers to the process of refining an artwork to achieve a desired visual quality and level of detail. Smart rendering is an approach that focuses on selective detailing, applying intricate rendering only to specific areas of the portrait that warrant viewer attention, rather than uniformly detailing every element of the piece.

A key principle in smart rendering is the intentional use of focus and blur to guide the viewer's gaze. For example, when rendering hair in a portrait, most of the shape can be kept blurry, while only a few strands near the character's face are sharply defined. This selective sharpness is not arbitrary; human vision naturally gravitates toward focused, highly detailed areas and tends to overlook blurred regions. By placing sharp details strategically, the artist can draw attention to focal points, such as the face, and away from less important areas.

Similarly, features such as eyes, eyebrows, and cheeks can be rendered smoothly, with soft transitions and minimal hard lines. Even if these areas appear somewhat blurred upon close inspection, the addition of sharply rendered eyelashes and subtle highlights can restore visual interest and direct attention appropriately. When viewing the portrait at typical display sizes, such as on a smartphone or computer screen, the intentional blurriness in certain regions becomes inconspicuous, while the focused sharpness in key areas remains impactful. Over-detailing every part of a portrait may result in a loss of focal hierarchy, making it difficult for the viewer to discern where to look.

Before commencing the rendering process, it is prudent to consider the intended use of the artwork. For instance, a piece created for online display at small sizes does not require hyper-detailed rendering, as such details would be invisible to most viewers. On the other hand, works intended for large prints may benefit from finer details in regions of emphasis. Assessing whether detailed work will be perceptible at the final display size helps optimize effort and avoid unnecessary overworking.

The concept of focus can also be leveraged in the treatment of backgrounds. Backgrounds that share colors or details with the main subject can distract from the central figure. To mitigate this, it is effective to use backgrounds with complementary or less saturated colors and to soften background elements, ensuring the character remains the focal point. By reducing the sharpness and saturation of the background relative to the character, the viewer's attention is naturally directed toward the subject.

A practical application of smart rendering is to keep features such as the face and lashes highly detailed, while simplifying or blurring less critical areas like the hair or background. Small details, such as added definition at the hairline or extra darkness in the eyelashes, further reinforce the intended focus. The balance between soft and hard edges is fundamental in guiding the viewer's attention and establishing a clear visual hierarchy.

Smart rendering in digital portrait drawing is achieved through selective detail, strategic use of focus and blur, and consideration of the artwork's final presentation context. This approach enables the creation of visually compelling portraits without unnecessary labor, while effectively directing the viewer's gaze to the most important elements.

EITC/CG/ADPD ARTISTIC DIGITAL PORTRAIT DRAWING DIDACTIC MATERIALS**LESSON: WORKING WITH LIGHT****TOPIC: LIGHT AND SHADOW**

Deciding on the lighting situation early in the digital portrait drawing process significantly contributes to achieving a more natural and harmonious outcome. Careful planning of light distribution, including the use of photographic references or direct observation with a lamp, flashlight, or mirror, provides valuable insights into how light interacts with facial features and body forms. Even if the subject's appearance does not exactly match the reference, this investigative approach is especially beneficial for complex compositions.

Direct frontal lighting is a common scenario and can be mentally visualized by most artists, but more dynamic or unconventional lighting setups require thoughtful observation and experimentation. Utilizing real-world references helps to resolve ambiguities in shadow placement and light behavior, resulting in more believable and compelling imagery.

To enhance the visual impact of a portrait, the introduction of cast shadows can significantly increase interest and depth. For instance, adding a cast shadow on the face can be achieved by introducing an additional light source, provided it aligns with the established direction of the primary light. Experimentation is often necessary to confirm the plausibility and effectiveness of such effects.

In digital painting software, manipulation of light and shadow is often accomplished through the use of blending modes on separate layers. Common techniques might involve starting with a "Multiply" layer to add soft shadows, particularly when planning to introduce more intense highlights later. Selection of blend modes should be guided by experimentation, as the visual outcome can vary widely depending on the software and the intended effect. Frequently used modes for light include "Add," "Overlay," and "Soft Light." Notably, modes such as "Color Dodge" may function differently across platforms (e.g., Photoshop versus Procreate), despite sharing the same name.

When addressing unfinished artwork, introducing shadows first and following with strong highlights along the edge of a figure can immediately increase dimensionality and help separate the subject from the background. Hands, in particular, are valuable compositional elements for creating dynamic shadow patterns. Their placement and orientation can introduce multiple, believable cast shadows that reinforce three-dimensionality. Strategic use of hands as occluders in front of the body enhances depth and realism, as their complex forms cast varied and interesting shadows onto adjacent surfaces.

Hair is another effective element for casting realistic shadows. The proximity of hair strands to the face or body determines the sharpness of the resulting shadow: shadows are sharper where the casting object (the hair) is closer to the receiving surface (the face or body), and they become progressively softer as the distance increases. This relationship can be conceptually represented as follows:

Sharpness $\propto 1 / d$

where d is the distance between the hair and the face or body. Thus, for each strand of hair, evaluating its spatial relationship to the surface is key to rendering accurate shadow softness.

It is advantageous to consider these principles for each visible strand, rather than applying the effect arbitrarily. Consistent application of these techniques across the portrait fosters cohesion and visual believability.