TAP Animator Creed: Virtual Learning Edition

1 we show respect
   We are a team. We live up to the same expectations as we would in person.

2 we take care of our technology
   We respect all equipment. We mute ourselves when we are not speaking. We do not talk over our teammates.

3 we focus
   We have a lot to learn. ALL our attention is focused on the class. We do our best to limit distractions around us. We wear headphones if possible.

4 we participate
   We speak up; we ask for help when we need it.

5 we own the content
   This is our class. This is our opportunity to learn more about the animation field.

6 we attend class
   Our voices and ideas are valued. We log into class on time and stay until the end whenever possible.
Welcome to The Made In New York Animation Project NeON Summer Edition!

Session 5 - Texturing
Opening

Share Verbally or in the Chat:

In thinking about textures we come into contact with in life, what is a texture that you are drawn to?

(ex. metal, plastic, grass, water, fabrics, etc)
Technical Lesson: Texturing
Terminology
What is “Texture”? What do you think when you hear “Texture”?

This is “Texture” in the 3D Pipeline.
Texture Map

A 2D image used to change the look of the object’s surface.
What is “UV”? 

Short for U, V, W. It means X, Y, Z like on a grid. UV is just XY because a Texture Map only has 2 Dimensions.
**UV Map and Unwrap**

**UV Map** - A map made from cutting up a 3D model so that it’s polygons lay flat.

**UV Unwrapping** - The process of creating a map from a model. Like unwrapping a present.
Material/Shaders

Like shading in art, it is how the object is displayed, by modifying the material’s properties.

Material/Shaders can ranged from realistic to cartoony.
Materials/Shaders vs. Texture

**Materials / Shaders**

Attributes and properties that control the look of an object.

ie: Properties can control how *grainy* an object can look.

**Textures**

Textures are placed on top of material. They can be hand painted, or photo scans.

ie: The graininess of the object doesn’t change even after it’s painted.
TAP Film
The Goondocks
The Goondocks: Reflection

What do you notice about the animal characters?

What do you notice about the background?

Why does the fence stand out against the environment?

Share it!
Video Demonstration
It just means I’ll start off with a silhouette of the model, from the side.
Advanced Examples
Hand Painted Example

**Overwatch** - Video Game Character

Widowmaker's Texture Map and Final Model.

**Hand Painted** textures are painted using a digital paint program.
Ni no Kuni - Video Game Environments

Studio Ghibli hand painted the environment’s textures, while the character models are cel shaded.

Cel shaded means the shadows are sharp/clean like 2D animation, instead of soft shadows.
Go and meet the King of Ding Dong Dell!
Guilty Gear XRD: Modifying UVs to adjust line width
Material/Shaders Example

**Toy Story 4** - 3D Animated Film

Character detail of Woody and Buzz.
Toy Story 4: Porcelain Material
Modeling Surfaces

Last of Us - Environment Textures by Rogelio Olguin
Blending Different Materials
Career Opportunities

**Matte Painter**

Traditional/Painting Skills + 3D skills to create environments in film

**Surfacing/Texture Artist** (example in video)

Digital Painting/Programs to enhance the appearance of props/characters

**Game Environment Artist**

Focuses on the creation, look, and props of a 3D environment in games
Resources

**Mudbox**
Works with Maya. Digitally paints on the model directly, likewise with Zbrush.

**Quixel Mixer** (Megascans free to use with Unreal Engine)
Tool to mix photo scans to create realistic tileable textures

**Substance 3D** (Free Student Option)
Multiple programs (Painter/Designer) to paint or mix textures, often for games

**Mari**
High Resolution 3D digital painting and texturing, often for film/animation
Adobe Alternatives

Ps
- Affinity Photo
- Clip Studio
- Krita
- GIMP
- Photopea
- Paint Tool SAI
- Paintstorm Studio
- MyPaint
- Paint.NET
- Fire Alpaca
- Medibang Paint

Ai
- Affinity Designer
- Inkscape
- BoxySVG
- Vectr
- Clip Studio
- Mischief
- Krita

Id
- Affinity Publisher
- PDFelement
- Viva Designer
- Scribus
- SpringPublisher
- Canva

An
- Cacani
- TVPaint Animation
- ToonBoom Harmony
- Clip Studio (EX version)
- Blender
- Open Toonz
- Krita
- Pencil 2D
- Fire Alpaca

Lr
- Affinity Photo
- RawTherapee
- Darktable
- Blue Griffon
- Brackets
- Aptana Studio

Dw
- Aequitas

Ae
- DaVinci Resolve
- Hitfilm Pro/Express
- Blender
- Vegas Pro
- Kdenlive
- Shotcut

Pr
- Reaper
- Tracktion
- Audacity

Au
- Aequitas
Questions & Answers
Frequently Asked Questions

Difference between material and texture?

Material allows object to display. Textures are applied to Material.

Do I need to know how to draw to make textures?

You don’t need any drawing skill to create textures. It can range from being very technical, like coding, to very visual, like painting.

What can I do to get started?

The creation of Textures is dependent on what program you use, so get a feel for different digital art/3D programs first.
Creative Engagement
Sensory Exploration Exercise

Take 10 minutes to design a ball that brings you comfort. Use whatever resources you would like.

Consider the following in your conceptualization.

- Think about how the ball looks.
- How does it feel?
- What does it sound like?
- What does it smell like?
- Is there a taste?
- What are the qualities of this ball that bring you comfort?
Grounding Technique

Start with Deep Breathing

Sensory Exploration

End with Deep Breathing
Closing

Share Verbally or in the Chat:

Considering what we have learned about and explored in this session, what is a sensory experience that holds meaning for you?

(ex. Fresh cut grass, toes in sand, smell of lavender, etc.)
Optional materials for next group:

Paper
Writing Utensils
If you would like to share your **ARTWORK** and have the chance to have your work featured in our Mega Groups, send submissions to:

submissions@theanimationproject.org

If you have **QUESTIONS ABOUT THE SUMMER PROGRAM** that are not answered on the FAQ page of our website, reach out to:

neonsummer@theanimationproject.org

If you have **QUESTIONS ABOUT INCENTIVES** that are not answered on the FAQ page of our website, reach out to:

tapincentives@theanimationproject.org
Thank you for attending this group!

Visit https://www.theanimationproject.org/minyap-neon-summer-edition-faqs for FAQs, group materials, access to slide presentations, and Mental Health Resources.

Check out our social media for more information about the TAP Weekly Challenges!