



## Blending Modes

When I started putting this course together it was with the intention of teaching the areas of Elements that would be most useful to Textile people rather than to photographers. Blending modes, the subject of this tutorial, are often used by photographers for fine-tuning their images. I'm much more interested in how they can be used in a more creative way to aid in collaging digital images together or in creating interesting effects.

This is a very big subject – there is a 176 page book written entirely about blending modes (details at the end) so I can't possibly cover it all in a tutorial. What I'm going to do is to try and give you an overview of how they are grouped and then give you some of my favourite examples of how you might use them in your creative work.

### **Terminology**

Blend layer is the layer you are applying a Blending mode to

Base layer is the layer(s) below the blend layer

Output colour is the end result – what you see

### **Overview**

Blending modes control how the contents of a layer interact/blend with the layers below it. Each mode applies a specific mathematical formula that determines what the final result will be. For example to quote John Beardsworth:

“The Color Dodge calculation is a simple example. For each RGB channel Photoshop calculates an output color by dividing the base color by the inverse of the blend color” (p19).

Please note that the use of the word 'simple' is his, not mine. I will freely admit that I'm not good with numbers – words, yes, numbers, not so much. Luckily you don't have to do any number crunching yourself – Elements will do it all for you.

The results are often surprising, even if you know roughly what each mode does in theory, so you'll often need to experiment to find the precise mode you need for a specific image and result.

The most common place to find the Blending Modes drop down list is at the top of the Layers panel although they do appear as options with some other tools. You always need two layers to use a blending mode. If you only have one then the option is greyed out.

The default setting is 'Normal' so that's what you usually see in the Layers panel.

Blending modes are divided into helpful groups:

<b>Group</b>	<b>Modes</b>	<b>Effect</b>
<b>Standalone</b>	Normal Dissolve	
<b>Darken</b>	Darken Multiply Color Burn Linear Burn Darker color	Darkens the image
<b>Lighten</b>	Lighten Screen Color Dodge Linear Dodge Lighter Color	Lightens the image
<b>Contrast</b>	Overlay Soft Light Hard Light Vivid Light Linear Light Pin Light Hard Mix	Adds contrast to the image
<b>Comparative</b>	Difference Exclusion	Compares the layer you are applying the mode to with those below it
<b>Hsl - hue, saturation, luminosity</b>	Hue Saturation Color Luminosity	Affects the colour and brightness of the image

Let's have a look at some examples.

## Standalone group

**Normal** – just what it says on the tin. It doesn't change anything.

**Dissolve** – gives a grainy effect.

- Create a duplicate layer and move it by a few pixels. (ctrl-arrow keys)
- Apply dissolve blending mode to the new duplicate layer.
- Reduce the opacity of the top layer until you get the degree of graininess you want.
- Try applying a Gaussian blur of 4 to the top layer to give a frosted glass effect.

## Darken group

As I said before these modes each darken the image in some way but they also have a very useful effect of getting rid of white on the blend layer. For instance if you paste a black and white image over a coloured image you can use a mode out of the darken group to get rid of the white background rather than having to cut the image out before pasting it..

**Multiply** – darkens shadows but not highlights.

**To get a sort of ink and wash effect try:**

- Make a self-blend ie an image duplicated on to a new layer
- On the base layer apply the Find Edges filter (Filter > Stylize > Find Edges.
- Set the blending mode of the top (blend) layer to Multiply.
- Reduce the opacity of the blend layer to taste.

## Lighten group

These modes all lighten an image in some way. They can be useful for brightening an underexposed (ie dark) image so that you can see more detail. To do this just make a self-blend and apply one of the Lighten modes to the top layer.

They also have the property of getting rid of black on the blend layer in a collaged image in a similar way to Darken modes get rid of white on a collaged image.

## Contrast group

This group darkens the shadows and lightens the highlights ie increases contrast

Of this group the mode I probably use the most is Overlay, especially when I am collaging one image or object onto another. To use this, simply copy and paste one image on top of another and apply a blending mode to the top one.

## Comparative group

**Difference** – output colour is based on the difference between the blend and base layer colours. This is one of my favourites for weird effects !!

Just put two images together on separate layers and apply the mode to the top one– see what you get.

## HSL group (hue, saturation, luminescence)

**Hue mode** – changes the colours of an image without losing the tonality of the original picture.

- Add a new layer and change its blending mode to Hue
- Change the foreground colour to the one you want to use
- Paint on the new layer and watch the magic

**NB** There needs to be a reasonable amount of colour in the original image for the new colour to interact with. If the image is very pale then the new colour added may not show up much.

**Color mode** – adds colour without obscuring the image's original tonality. It differs from the Hue mode in that it can add colour to an image that previously didn't have any, which Hue can't.

## Hand tinting a black and white image

- make sure the image mode is rgb not greyscale (Image > mode > RGB)
- if your image starts out in colour, use the convert to black and white facility in the Enhance menu.
- Make a new layer above the image
- Start painting on the colour you want, using a separate layer for each area/colour.
- Set the blending mode to Color on each added layer.

## Blending modes on tools

Blending modes can also be set on some painting/drawing tools such as the paint brush, the healing brush and the pencil. For tools such as the paint brush and pencil I would recommend you keep the blending mode for the tool itself (set on the Options bar) on Normal and do your drawing/painting on a new layer. Then set the blending mode on the layer. However if you want to work this way with the Healing brush you need to have 'Sample All Layers' selected on the Options bar. The results of painting directly on to the image with the Healing brush and using it on a separate layer are often subtly different so try both and see which you prefer.

## Healing brush

An interesting way to use the healing brush is to add a texture or pattern to your image. You can select one of the patterns that are built in to Elements from the Options bar, you can download third party patterns from the Internet or, more interestingly, you can create your own custom patterns. You do this in the same way you created your own brushes in the brushes tutorial.

- Open an image
- Select an area using the rectangular marquee tool
- Select Edit > Define pattern from selection
- You then get the option to give your brush a name

Simple as that. Your pattern will now be available for use by any tool that can use patterns.

To use the Healing brush to add pattern:

- Set the healing brush Source, on the Options bar to Pattern and select a blending mode of your choice, also on the Options bar.
- Draw on the image then wait for Elements to do its calculations and give you the visual result.

## **Book**

### **Photoshop Blending Modes Cookbook for digital photographers**

49 easy-to-follow recipes to fix problem photos and create amazing effects

John Beardsworth

Ilex – 2005

ISBN 1-904705-68-5

**NB This book is for the full version of Photoshop but most of it can be adapted for Elements**

## **Assignments:**

1. Produce an 'ink and wash' version of an image of your choice
2. Produce a colour tinted greyscale image of your choice
3. Add some texture to an image using the healing brush and a custom pattern
4. See if you can come up with an answer to the question at the end of the video.