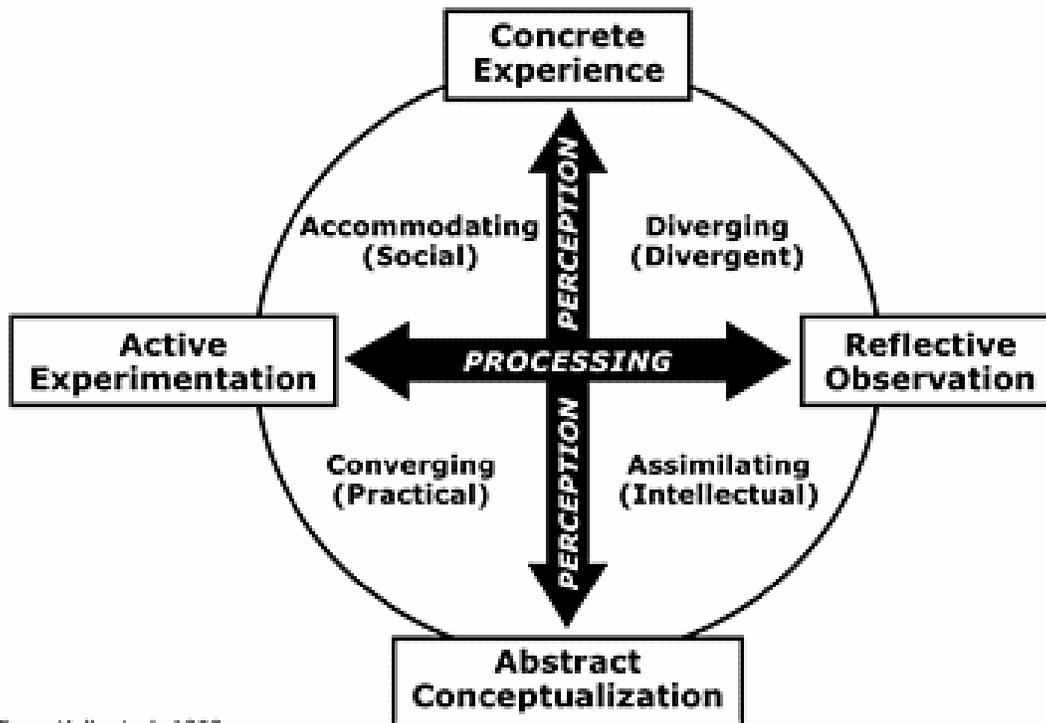


Figure 1. Experiential Learning Theory



From Kolb et al. 1999

VISUALIZATIONS OF KOLB'S LEARNING CYCLE

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I'm close to the center cross-hairs in the "Diverger" quadrant, according to Kolb. That apparently means I hover somewhere between Concrete Experience and Reflective Observation. Reading through the definitions of his categories makes me wonder why he chose the labels he did. They don't seem to be very accurate descriptions and may even be misleading. For example: My career in Visual Communications certainly appears to fall into his Diverging area. However, the ancient definition of "ars", a verb meaning "to connect", gives the noun "art" the meaning of "that which has been connected". So the word "converge" more accurately represents the activities in which I'm engaged. "Diverge" is the opposite.

Kolb's labels for his Learning Cycle also seem to convey erroneous meanings. Let's look at the imagery of the adjectives compared to the nouns. If I were to visualize what he has written, "Concrete" becomes a concrete block, "Reflective" is represented by a mirror, "Active" is someone moving quickly, and "Abstract" is a Picasso. I see no reason for these extraneous words to be there. Solid would be a better word than Concrete. Introspective is more appropriate than Reflective, simply because a reflection is a reversed image. Why use Active with Experimentation? Is there Passive Experimentation? Do we need to differentiate them? Likewise, why focus on Abstract Conceptualization rather than any other kind of Conceptualization?

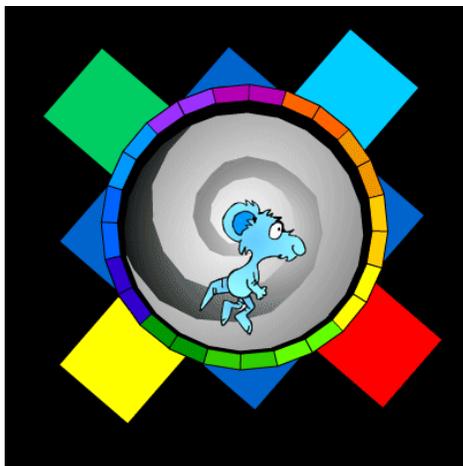
Looking at the nouns, “Experience” does not connect with concrete, unless something is being built. “Observation” could be a lookout tower, binoculars, or a microscope. “Experimentation” translates into laboratory equipment. “Conceptualization” is a light bulb or thought bubble, above someone’s head. All of these work by themselves. Although two of them have the same root “Experi”.

The “Ferris Wheel” that Kolb has built for us to cycle through does not connect Learning styles to “Thinking Styles”, nor Multiple Intelligence Theory, does not connect Learning to Personality, nor to Motivation. I guess I’ll have to add those, as other intellectual rides, somewhere along the midway of this Academic Carnival.

The following comments are based on several animated environments (which you can’t see) based on the Kolb diagram above. Visual learners gather meaning directly from the geometric relationships of the images, without needing to translate to or from any other language. Without the images we must properly translate and interpret the words, then reconstruct them in our minds as image maps or sequences to determine meaning. Benjamin Bloom considers that this thinking process does not include his scheme of hierarchical verbs which define “college-level” learning, and is therefore non-cognitive.

Non visual learners must scan their vocabulary of synonyms and define the words with other words, with no regard for imagery. If you can do this by ordering your verbs in “proper” stratification, Bloom considers that you have “cognated” (my verb). These two processes define the learning style differences between people with “image-ination” and those without. You must ask yourself, therefore, if you can really learn or understand without the appropriate imagery. Further, does Kolb’s own imagery accurately and cognitively define his own words? Is he visually and artistically bilingual? Do Kolb and Bloom have any validity in an Artademic learning environment?

See Kolb at <http://www.archimuse.com/mw2005/papers/schaller/schaller.html> and Bloom at <http://oaks.nvg.org/taxonomy-bloom.html>. The Kolb site discusses the theory in regard to web design. The Bloom site shows how others redefine the concepts with more words.



KOLB 2D SPINNING ANIMATION
In this view the learner is depicted as a generic academic rat, exercising a few brain cells on a traditional tread wheel, with no regard for individual learning style. The stages in Kolb’s cycle have been color-coded as follows: green for Conceptualization, yellow for Experimentation, red for Experience, and blue for Observation. There are specific design reasons for the choice of colors and other elements that I won’t go into now.

KOLB 3D ANIM #1

Here, the X and Y coordinates of Kolb's diagram, which combines Learning Styles with the Learning Cycle, are rotated on the Z axis and shown spinning in its simplest form.

KOLB 3D ANIM #2

The larger square of the Cycle has become a pyramid, with the smaller square of the learning Styles spinning at its own speed, at its own level. A subtle but important design difference here is that the colors are not painted on the sides of the pyramid, allowing each side to represent a specific subject, yet unlabeled, which turns past invisible color-coded lights, illuminating each subject in turn as it passes by.

KOLB 3D ANIM #3

The spinning pyramid has been joined by four smaller pyramids around its periphery, to symbolize other elements that might be connected to, or which have been ignored by, Kolb's concepts. They purposely rotate in the opposite direction as they would if connected to gears in a larger mechanism.

KOLB 3D ANIM #4 PERSPECTIVE

This animation and the next are rather large files for the web and may not run well on some computers, so I've captured significant frames from them to point out certain important design elements in the visualization. The top two frames show the 3D model from the audience side of the stage (the balcony), to use a theatrical metaphor, with a wheel of Experience symbolizing a Performance. The other three elements in the cycle are all backstage. The bottom two frames are from the perspective above the conceptualization of the Stage and even the Play itself, looking at all parts of the production from the perspective of the Producer.

KOLB 3D ANIM #5 VIEWPOINT

These frames look directly at the elements of the Cycle from an animated camera, orbiting past each, showing its own viewpoint, relative to each of the others. This displays the primary error in Kolb's theory, or in my depiction of it. That is the absence of lateral motion around the X axis in the Observation Cycle. For in reality we most naturally observe and reflect directly upon our rehearsals before committing to a performance. In such cases there would be only three stages in the Learning Cycle. To properly symbolize that, the golden knowledge of Experimentation would be able to be seen through the true blue glass of Observation.

