Design Pedagogy

What skills are necessary to be effective designers in an industry and world becoming more and more reliant upon AI? AI code is able to provide formulas to standardized questions, provide lists of objectives, the agenda for implementation and product. However, professionals adept at design will approach the process through emotional and psychological facets. This creative method is fearless and excited at the idea experimentation, failure, group success. A designer having this mind set is engaged at every level. This is requires thinking of the user and their experiences as the end goal. This philosophical design concept employs the notion that the end product is birthed from creativity and not formulaic equations. Essentially this means human creation for human experience.

To foster this concept in students we implement teaching that employs both the education set forth in the Common Body of Knowledge and Skills, as these are fundamental and weave in Design Thinking. Together these over arching approaches can begin the transformation from student to professional design thinker with a user centric strategy as their end goal.

This approach is a sometimes non-linear, sometimes linear process integrating synergistic thought; semantic, synthetic and pragmatic concerns occurring throughout the design process. Its emphasis is on user experience, as uncovered by the user-designer. Synergistic Thinking can be defined as understanding and integrating two distinctly opposing, yet necessary, modes of thought. It pulls equally from the process of Logical Thinking and Associative Think- ing. Logical Thinking is verbal, sequential and analytic—in short, linear. The theorist and experimentalist in me use these when defining and making. Associative Thinking combines related ideas or events via imagination or memory, in ways not necessarily logical. This can occur through stray thoughts, nearby events, and sometimes 'mistakes' or, the gurgling of the unconscious. Associative Thinking is non-linear. Logical Thinking is embedded in the conscious mind, while Associative Thinking simmers and ferments in the sub- conscious mind. Blending these two notions together develops the Synergistic or Creative Thinker. This mode of processing might happen after logic, for example.

Returning to synergy, we see that logic and association play a large part in method and ideology. As Input Sensitivity, both types of thinking can be linked with intuition. As reactions these are based upon certain preconceived notions regarding thought, ideas, images, situations, etc. These notions resonate within the self as authentic and true. They are made apparent in either emotional reactions or supporting actions and these reinforce conviction. Synergistic thinking requires skillful flexibility, a dance, between logical and associative thought. Known as Janusian Thinking, it builds upon the combination of using both styles of thinking in a deliberate application of opposites. In the context of design and implementation of a project synergistic thinking is the process of using both simultaneously toward a holistic end.

These subtle variations during the design stage — the addition or subtraction of a particular element, for example — can have enormous effects. Of course, these subtle differences can be successful or be disastrous. However, many times the outcome is surprising and invigorating.

We can summarize this process through the following descriptions;
Empathize: consult, observe, investigate established norms and conditions.

Define: gather, group, analyze as a means to synthesize core problems into a formative statement.

Ideate: identify emerging, new solutions and alternatives used to solve the problem statement.

Prototype: emergence of new product solutions via small scale versions highlighting examples or features that solve the initial or identified problem.

Test: examine, assess and experiment with all newly found product solutions

Continue: re-examine, re-define, re-create as new insights reveal themselves at any stage in the process.