

# Visual Problem Solving

by Jim Crane, 2008

Visual Problem Solving is a unique pedagogy that I developed over thirty years to induct students into visual arts. It was, and is, the foundation of Eckerd's art program. It is now being taught by an adjunct, one of my former students, Betsy Lester. If she should leave for whatever reason, there is no one else to teach it. This is reason enough to document the course preserving the essential pedagogy.

Beyond this, it is a tested, proven, and radically innovative methodology with application far beyond the college. To tell you how much I believe in the potential of this method: As a senior professor, I taught Visual Problem Solving for those thirty years. It is no secret that senior faculty have as little to do with introductory freshmen as possible, preferring that they be a little more shaped, polished, and receptive. Visual Problem Solving is, and was, not only a freshman course but also open to non-majors as a general education elective for students majoring in any discipline. Significantly, it is now being taught by an adjunct.

When I came in 1963, the college's third year, I replaced John Dixon (an art historian) and that established whatever art program the college offered as studio-based. Bob Hodgell and I quickly agreed that we had to offer as beginning requirements a drawing course he was teaching and one in basic design. I was to change the content of his Introduction to Art course into design, which I had taught before.

Most college design courses are based on the Bauhaus-inspired focus on the elements of design, those components that are the basis of any visual image of every style, such as line, shape, texture, color, etc. Problems involving the focus on each element in turn are expected to provide the student with awareness of the necessary components to construct visual forms.

The problem I had encountered with this method was that my artistically unsophisticated students took the course but it seemed to affect their work very little. When they made images they were little different than those they made before taking design. I wondered if it might be possible to begin with simple images and transform those images, introducing the elements into increasingly complex visual forms. I began with sun symbols and found that they would not sustain the increasing complexity. I thought about this and decided that the most universally used subject is the human face. I called them face symbols to suggest the full range from Peanut's Lucy to the Mona Lisa.

I was working under an extreme handicap. Design classes are customarily taught in a studio room filled with tables for one to four students and under faculty supervision. Our classes were held in a walled-off section of the college library. We had chairs but no tables. I decided that the only way I could proceed was to assign problems as homework to be done outside of class and to use class time to review the work brought in. This meant that the assignments had to be done on a small scale that could be done in dorm rooms or the library, and carried around, but if they were to be discussed, they had to be visible to everyone in the class.

After some experimentation I settled on what seemed to students an outrageously heavy assignment: Problem 1. On 5 by 5 inch white paper make 50 face symbols using a black, chisel nose felt-tip marking pen. You are limited to 20 lines, either arcs or straight lines. Your solutions are due next class session (three to four days). This had an unanticipated effect. The students most experienced in art felt terribly and unfairly handicapped. There was no way to show off the skills that always had brought them recognition. At the same time the less "talented" students became more self-confident that maybe they could do it and it would be fun.

At this point I need to say that Florida Presbyterian College (pre-Eckerd College) attracted no students expecting to major in art. There was no art requirement in admissions so the more experienced students had some high school background but little sophistication. Like most of our students they were very bright and verbally articulate and quite willing to talk and argue over anything. A lack of depth of understanding was never an obstacle. I came to believe that whatever understanding of art they brought to class was more an inhibition to their learning than help. I decided to neutralize their preconceptions.

I invented "THE GAME." The Game was introduced as a simulation with specific rules and prescribed moves. I was the Game Master, (coach, referee, and absolute authority of the Game). Sometime past the middle of the semester I would appoint each of them as Game Master of their own stream of work. They would define their own visual problems but had to keep proceeding with each generation of images growing out of the previous solutions.

Anyone who wished could leave the course by dropping out before the Game began but to stay meant accepting the rules of the Game as I provided them. The first limit imposed was that the Game Master would entertain no questions from outside the Game until after the review of the third problem.

By that time a pattern was established. In the meantime, I assigned a logbook due at the end of the semester recording the journey of the course. All questions and responses as well as a record of problems and solutions were to be recorded. In the question session I answered questions of the relevance of the course to art.

An important element of the Game was in the class reviews of the problem solutions. Parent images from the previous generation were displayed with the solutions of the current problem, establishing a connection. Each generation was based on the prior solutions and the starting point for the next problem. It was important that students saw a strong connection between a problem and the one before and following. It was just as important that they not attempt to project ahead so as not to always be anticipating future moves but focus entirely on solutions to the current problems.

I realized after the Game had been in place for a while that I'd discovered much more than an alternative design approach. I'd found a way to make a linear sequential model of a creative process that is much more random in usual practice. Instead of the common problem-solving procedure of defining the problem, attempting a solution, achieving a solution, and then closure, my students learned to operate knowing that there are many possible solutions, to go with the best, and then look at the solution not as a complete closure but as the starting place for subsequent problems. The question then becomes "OK, what can I do with this now?" They learned that one always works within limits, that limits can be changed but not ignored, and that extremely restrictive limits can often be transcended in solutions much more interesting than one might expect.

I have not mentioned the overview. A required part of the logbook became a written description of the course assigned to help the student see the course as a continuing process within time limits but which could continue on and on, hopefully into other art courses.

Grading was based on: Attendance and participation (this is a highly interactive course), the logbook and overview, the final solution to their self-set problem which should, once and for all, establish the relevance of Visual Problem Solving to art and much else. While everyone began working within the same extreme limits and there was some resemblance of all solutions, the final solutions were and are always surprisingly diverse. There is a sense of celebration for the class as they are surprised by each other's work, work that they have watched develop over the semester.

Through my own work and teaching I have come to understand that visual arts are the result of thinking in images and forms, just as mathematics are a mode of thinking using a non-verbal symbol system. As a result of art having become an academic discipline, there has been an increasing attempt to base art on non-visual ideas. The magic of Visual Problem Solving is that it instills and reinforces visual thinking.