Urban Design and Planning Studios A Unique Educational Process

The following is intended to begin a discourse on "studio culture", especially related to the participation of first year graduate students. Studio formats are a preferred problem-solving venue in planning and design curricula. For many students in urban planning, this format is new and can often cause frustration as it requires a combination of independent work and intense faculty participation. Studio size by College standards is 15 students. More than that can present additional challenges for faculty and students, and may require modifications to the studio process.

One objective of this dialogue is to develop a studio hybrid that has direct application to general planning studios; recognizing the differences between planning and design problem-solving objectives. In addition, the dialogue asks what process, means and methods can be taught as pre-studio preparation for first year students.

Principles and Methods

Studio: a room, workplace or establishment where something is made (art, music, film, etc.); a problem is resolved. The key word is "made", a place and environment wherein a (creative) process results in a specific product. This varies from the terms "classroom", "auditorium", meeting and seminar rooms that are associated with verbal discourse as opposed to the making of some physical/spatial composition.

Studio: a process of study that is progressive (proceeding in steps) and conclusive that contains the following essential elements and principles:

Elements

- 1. Individual work space suitable for the skills and methodologies required to produce a product, not shared desk space
- 2. A collective of individual work spaces that enable individual and semi-independent work as well as collaborative small and large group interactions (and the space to accommodate those interactions).
- 3. One instructor per fifteen student relationship
- 4. Student access beyond class hours
- 5. Display and presentation areas
- 6. Computer support space within the studio

Principles

A process of problem-solving that leads to the making of a specified product (physical composition that requires space for the development and practice leading to that composition: music studio, sculpture, design and plan-making, etc.); key words: problem-solving, practice and development

Problem-solving. This is critical to studio operation and success and will startle and trouble some students based on the following differentiation between *ordinary problem-solving and creative problem-solving*.

Components of creative problem-solving (Cropley and Cropley, 2009: Fostering Creativity)

- 1. The problem is not specified exactly
- 2. The nature of the solution is largely open
- 3. The pathway to the solution is not specified
- 4. The criteria for recognizing a solution are open
- 5. Do not be afraid of complexity
- 6. Embrace ambiguity

Yes! Over-structure is frowned upon as it is critical for the faculty member to frame the problem in a way that students must redefine the problem for themselves as well as the approach to the problem. This does not mean loosy-goosy and requires significant effort. Creative problem-solving requires openness not closedness, divergent thinking, appreciation for ambiguity.

When seeking innovation in studio process, also referred to as "novelty", here are recommended practical ideas for students:

- Be interested in your own unusual ideas
- Do not be afraid of your own impulses. Regard them as a valuable source of ideas
- Be aware of your preferred cognitive style and ascertain whether it facilitates or blocks generation of innovation or novelty
- Let your imagination go
- Seek wide experience (marginally related classes, practical, assignments, etc.)
- Look for links among pieces of information, especially unexpected links
- Look for relevant but remote associates
- Be willing to cross boundaries
- Try to build networks of related knowledge
- Transfer ideas from outside settings (including previous jobs) to new tasks
- Seek to go beyond information given
- Avoid treating a new task as simply another example of the familiar
- Try to look a the new or unexpected elements of the task that made it different
- Try to find multiple answers
- Look for the unexpected but supportable answers
- Ask yourself if you have generated effective surprise
- Be ready to defend your own ideas, even if they are unconventional

In creative problem-solving, look for the gaps and inconsistencies in the information and knowledge about a project, as therein may lie the gestalt.

Studio is an integral educational process where the theory, process, methods and skills are brought together to construct a (story, argument, position, strategy, etc.) in a spatial format that reflects the CST matrix—culture, space, and time aspects of community (all or nothing).

Independent and semi-independent work process in studio leading to the production of a unique composition; (studios that produce a group product require individual signature elements within that product); based on the integral process

Studio is a learning process not a demonstration of how much you already know!

Studio requires discipline: self-learning and a bit of self-centeredness

Studio may be non-linear process: a process of exploration and discovery

The uncertainty principle: following the information, data, emerging "stories" to resolution, not predetermining outcome and working toward that outcome

Formulation of an analytical base, a space-use program (what, how much, where, when), and definition of an adequate context within which the project is immersed

Desk critiques: a one on one dialogue between student and instructor related to the developing composition; this is a key educational element of studio and requires the following:

- Direction of intent and expectation from the instructor
- Advance preparation by the student of progress to be critiqued; requires out of class time commitment
- A specification of next steps
- Convention: preliminary analysis, concept development, testing, design/planning development, testing, final completion

Individual exploration of design and planning process with emergent products

Interaction with colleagues on data analysis, critiques and presentations

Interaction with administrative and substantive clients: the community

Student Issues:

Many students are new to the idea of "studio" and grapple with the following issues:

- 1. Independent work that may not be as structured as is comfortable in other courses; many students become reticent with a new structure and are unaccustomed to a new form of disciple: self-learning
- 2. Students are expected to gather information and engage in skills and methods with less instruction and guidance from instructor

- 3. Inexperience with non-linear processes, i.e., "free fall" that requires multiple avenues of idea exploration and testing
- 4. One on one critiques with instructors—some students enjoy this process while others avoid the contact
- 5. Requirement for out of class work as preparation for in class critiques and interactions
- 6. Capability to prepare work suitable for critique and discussions (adequate portrayal of ideas and information in spatial formats)
- 7. Uncertainty of instructor expectations, deadlines, objectives
- 8. Disinterest in topic assigned
- 9. Lack of understanding of skills, methods needed for studio

This can be expanded with student input.

Example Methods Useful for Studio Process

- 1. One to three day charrettes to establish directions, approaches, programs using parts/polarity analysis, delography and other techniques
- 2. Brainstorming sessions: quantity of ideas over quality; criticism is not permitted because of its inhibitor effect; hitchhiking by attaching one's ideas to those of others is encouraged; wild or exaggerated ideas are welcome; visualize
- 3. Sketch problems: a three day independent assignment w/o faculty assistance for concept development
- 4. Community workshops
- 5. Diagramming and visualization techniques to consolidate ideas and directions (all studio types benefit from these techniques to identify emergent ideas and patterns otherwise lost in a 'data glut'
- 6. Mid term semi-formal/formal critiques

Studio types can be varied and structured in response to the topic and client group. These basic principles apply to most if not all types.

Suggestions:

Incorporation of studio methods and means discussions into fall and/or winter courses:

Communications, Studio Prep

Introductory workshops in fall and/or winter quarter

Earlier determination of studio topic, where possible

Scheduled visits to active studios in planning, urban design, architecture, landscape

Assessment of what is a studio topic and what is not suitable

More contact with second year students experienced in studio process

More coming...

Professor Ron Kasprisin

Addendum to Planning Studio Dialogue Professor Kasprisin Summer-Fall 2012 August 2012

In our discussions last spring regarding the purpose, nature and functions of urban planning studios on the graduate level, specifically involving students with little or no studio experience, the term **studio culture** was and is used in a manner meant to distinguish the differences in studio process from that of other learning formats and structures. Herein exists confusion for many planning students. What is studio culture?

In my last memo, I discussed the various elements of studio process and environment, including:

- 1. The physical, spatial nature of studio as a making-environment (design, plan, art object, etc.)
- 2. The interactive relationships required for learning (faculty to student, student to student, student to group) in a collaborative process
- 3. Both group and semi-independent work ethic, in and out of class; with extensive preparation for class interaction through out of class effort; and, the most important
- 4. A <u>creative problem-solving process</u>

This last element deserves more discussion because it represents and contains the key distinguishing characteristics of studio culture. (this is not to say that other teaching formats and process do not engage in forms of creative problem solving; and I argue here that the studio process is acknowledged as the most effective format for creative problem-solving).

Traditionally in the design and art fields, there has been and continues to be an emphasis on the creative aspects of problem-solving as explored and tested in a studio environment where making, composing, fashioning (plans and designs) are the fundamental aspirations of the process. In *Fostering Creativity, Cropley and Cropley 2009*, the pursuit of "novelty" or innovation requires a creative process. This is not necessarily the case in traditional planning studios where linear goal driven methodologies can inhibit creative solutions. Let's explore creative problem solving as it relates to the studio culture.

In a studio culture, pursuing a process of creative problem-solving (as opposed to ordinary problem-solving—more linear, goal driven, more certain, highly structured and/or orthodox), requires an identification and understanding (and training in) the key elements that differentiate the two processes. Those key and different elements for creative problem solving include process, methods and behavioral traits that include:

Preference for complexity over simplicity (affects the choice of methodologies between those that deal with and address complexity versus those that are more easily processed)

Openness (to differences, unknown, new directions)

Tolerance for ambiguity (enables the student to participate in the further definition of the problem itself; decreases the tendency toward orthodoxy; i.e. the use of *New Urbanism* regardless of context)

Tolerance for uncertainty (enables a pursuit of variability, following the data path versus manipulating the data for goal achievement)

Self-confidence (a belief in one's ability to be successful, also referred to as self-centeredness)

Risk-taking (not being afraid to fail, embracing the lessons in attentive-failure, confidence in experimentation)

Adequate Skills and knowledge

Recognition and engagement in conflicts and polarities within the process

Recognition of gaps in existing knowledge (incompleteness and inconsistency)

Drive to round out recently emerging novelty

Identification of contradictions in accepted knowledge and identification of associated polarities in emergent solutions

Use of visual analysis and representational methods (enables the dissemination and understanding of relationships and gestalts within the data stream)

These are key, there are many more.

We all have many aspects to our personalities, in many cases up to twenty within a working hierarchy. What does this mean? If you find that some of these traits or elements are lacking or less defined in your own process and self-traits in the manner that you approach problemsolving, there are a number of approaches that you and faculty can work on to strengthen elements defined through research as better enabling the creative process:

- 1. Focusing on creative potentials that already exis
- 2. Eliminating blockers that inhibit the expression of these potentials (fear of...pick one)
- 3. Focusing on what people do not already possess (knowledge, skills, favorable attitudes, values, etc.) and helping (students) acquire these
- 4. Increasing your individual tolerance for ambiguity, uncertainty and increasing your preference for (or at least reducing your fear of) complexity; brainstorming exercises where no idea is a bad idea; generating multiple concepts and reserving the critical assessments for a later period; quick sketch problems to exercise the pursuit of variability and novelty, etc.
- 5. Learning how to play (reduces the fear of failure as one can't fail when playing; reduces the fear or pressures of accomplishment; engages symbolic objects of play versus

"toys"—digital programs, gaming objects, structured objects with definitive rules and boundaries)

Techniques for improvement include:

Simple loosening up exercises (sketch problems, charrettes, etc., brainstorming) Systematic training procedures (prep courses)

Organized programs involving sequences of lessons, special materials, and practice (prep courses)

This training can be beneficial if it satisfies four requirements:

- 1. It is based on general cognitive principles such as problem recognition
- 2. It is prolonged and demanding
- 3. It involves real-life examples such as case studies
- 4. It involves practice exercises that are domain-specific; and is both simultaneous and specific

Studio culture revolves around and is founded in *creativity*, a creative problem-solving process.

Cropley and Cropley:

"creativity is not the preserve of a small band of people chosen by nature. All individuals can be encouraged to increase the extent to which they generate effective novelty (innovation-kasprisin)" p. 208 Fostering Creativity.

Creative differences (potential and capability for...) exist within all personality types and patterns, Charles Johnstone MD, *Creative Imperative, Necessary Wisdom*

There is much much more. I hope this provides a beginning insight into studio culture.