

## **Carola Boehm, Integrating creativity into the curriculum: A methodological approach for the Sciences and the Arts**

### **Abstract:**

There is a lack of 'explicit education' in the existence of different modes of creativity and different methodologies for initiating creative processes. The workshop, titled the "Creating-Creative-Processes-Workshop", will demonstrate how a series of short exercises can provide a brief experience with a wide variety of distinct forms of creative processes.

### **Creativity education and research**

The creative process is one of the most essential but also one of the least addressed components of artistic activity within the whole of the creative and performative arts. Until 2000 references to creativity in the last 25 years account for ca only 0.5% of articles. Creativity is barely covered in textbooks or university departments.<sup>1</sup> In higher education, where taught as part of a single discipline, concentration is rather on technique or history and theory related to that discipline. Interdisciplinary programs, however, have the unique opportunity to initiate explorations of the origin and methodology of art production.<sup>2</sup>

So far two models of creativity prevail currently

- improvisational mode preferred by arts students, composition students, etc
- restrictive mode, preferred in laboratory research, field work, academic scholarship and industry initiatives

Since 2000, one can perceive a slow but constant increase of research into creativity and creative processes and its acceptance as an area of research as well as an area for the facilitation of learning. Traditionally in higher education, concentration was rather on technique, history and theory. Interdisciplinary programs, however, have the unique opportunity to initiate explorations of the origin and methodology of art production.

### **The aims of the workshop**

The exercises in this workshop address the above issue and they provide a brief experience with a wide variety of distinct forms of creative processes by using only the simplest of utensils (paper, pencils, erasers, coloured pens, squared paper, and pennies). The exercises can address both groups of individuals, those who are 'being trained' to design tools for creative purposes, and others, who will use tools to create content in a creative context. For both these groups, creativity tends to be important for the working process itself. But for both groups, I have found that there are narrow, preconceived notions of what types of creative processes are common and acceptable in their own field. Most individuals, through education and training, are used to only using the smallest number of creative methodologies (mostly improvisational modes for artists and restrictive modes for scientists) and are often unaware of the full diversity of creative methodologies.

The workshop aims to demonstrate how many neglected alternative exist within the repertoire of human experience of artistic creation and is aimed at making individuals aware of the wide diversity of artistic methodology. Consequently participants experience a greater critical awareness of

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<sup>1</sup> · Since 2000 a slow but constant increase into creativity and creative processes, from several directions: Increase in education research, Increase in interdisciplinary studies and cross-discipline covering studies, such as supported by Palatine (See their series about creativity in arts and humanities education), Increase in acceptance of practice-based methodologies in HE.

<sup>2</sup> References to creativity between 1975 and 1999 in Robert J. Sternberg, ed. Handbook of Creativity, Cambridge University Press, 1999 account for only 0.5% of articles indexed in abstracts. He mentions that creativity is barely covered in psychology textbooks and university psychology departments rarely offer courses in creativity. "This paucity of attention also applied to the material presented in arts classrooms. Professors who are teaching an individual discipline tend to either concentrate on technique or they examine the history and theory related to that discipline. Professors who are teaching within interdisciplinary programs, however, have the unique opportunity to initiate explorations of the origin and methodology of art production" See also Linda Weintraub, Making Contemporary Art, How today's artists think and work. Thames and Hudson, 2003.

- the methodologies and techniques chosen to create something artistic
- the design of tools and processes for creative productions
- the understanding of creative processes in us humans
- the potential diversity of interaction between tools/processes and humans in the process of being creative.

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## The Workshop

Workshop consists of brief exercises. The exercises provide a brief experience with a wide variety of distinct forms of creative thinking and creative production.

The workshop is aimed at making individuals aware of the wide diversity of artistic methodology, which can influence

- the methodologies and techniques chosen to create something artistic
- the design of tools for creative productions
- the understanding of creative processes in us humans
- the potential diversity of interaction between software tools and humans in the process of being creative.

This diversity of techniques can be utilised by the whole range of creative users, choreographers, composers, visual artists, writers, as well as outside of the arts. Examples are drawn from many cultures and diverse areas. Final discussion centre around how this relates to creative processes in a specific subject area in general and tools specifically, always considering the creative process(es) that need(s) to be supported

Headings of some of the exercises are for instance:

1. "Breaking preformed views of our world",
2. "Using your destructive inclinations",
3. "Introducing subjectivity through verbal communication",
4. "Working with many ideas at once",
5. "Symmetry and Repetition",
6. "The unfulfilled self",
7. "Master / Slave",
8. "Directed Chance",
9. "Democracy",
10. "Imaginative Persona",
11. "Division of Labour",
12. "Multiple Exposure and Palimpsests",
13. "Governing Metaphor",
14. "Layering and Sequencing",
15. "Suggestive Ambiguity",
16. "Scoping an Audience",
17. "Choosing a mission".

We will need:

- Paper (lots)
- Pens
- Pencils
- Erasers
- Coloured Pens and Pencils
- Squared Paper
- pennies

## The Exercises

### I. The classics

#### A. The Circle – Breaking preformed views of our world

1. "Draw a Circle"
2. Compare all circles drawn in the group. Are most of them very similar? This might demonstrate our preformed views of the world which inhibits our creative potential? Are there exceptions? Which ones?
3. "Draw a sad circle"
4. Compare. Breaks up preconceptions by using non-common usage of adjectives for a noun.
5. "Draw an angry circle"
6. as above (keep the angry circle picture for later)

#### B. Algorithmic, Patterns, "Symmetric or Repetitive Sequences"

1. "Mark a square 5 wide by 15 squares long on your paper"
2. "Chose a Sequence of numbers using numbers from 1 to 4"
3. "Repeat them throughout the paper"
4. "Colour in four different colours"

#### C. Directed Chance

1. "Get one of the coins"
2. "List on your paper 10 actions/instructions - trying to be creative about the actions" (Actions can include colouring, form, what to do with the paper, sequence, etc etc)
3. "Flip a coin for each action to decide whether to follow this action or not"

#### D. Democracy

1. "Use the 10 actions/instructions from exercise "Directed Chance""
2. "Vote on each of them in sequence and one person to execute"

### II. Liz Lochhead - drawing on your five senses

#### E. Abstract Nouns – Embodiment of Abstraction

1. Think of a few abstract nouns, such as hate, love, alienation, fear, trust, respect, etc
2. Chose one of those and write it in the middle of the page
3. Answer the following questions with replacing BLANK with your chosen word. (You can keep strictly to the format of the questions or be creative in your answer)
4. Questions:
  - a. What does BLANK look like?
  - b. Does BLANK smell?
  - c. The sound of BLANK is what?
  - d. BLANK tastes like \_\_\_\_\_?
  - e. What does BLANK feel like?
  - f. What does BLANK say?
5. Re-arrange, throw one out and read out. BLANK can be left blank like a riddle, or mentioned.

#### F. Imaginative Persona - feeling somebody else's senses

1. Chose one of the personas and imagine being that person
2. Write about the following (feeling, what you see, what is happening, anything)
3. Looking out of the window, what do you see, smell, hear?
4. Looking around the room, inside?
5. SHOCK!!!, What do you remember?
6. You go out. What do you experience?
7. Anything, joining, concluding, free
8. Take 1 minute to refine

### III. Linda Weintraub - integrating the "the intractably avant-garde"

Categories of Weintraub exercises: Scoping an Audience; Sourcing Inspiration; Crafting an Artistic Self (Disclosing biography, Inventing biography, Transcending biography, Epitomizing biography); Expressing an artistic attitude; Choosing a mission; Measuring success.

Headers of her exercises:

- |                           |  |
|---------------------------|--|
| 1. predetermination       | 17. derangement                          |
| 2. collaboration          | 18. whim                                 |
| 3. directed chance        | 19. undirected chance                    |
| 4. dictator/slave         | 20. exquisite corpse.                    |
| 5. democracy              | 21. misfortune                           |
| 6. division of labour     | 22. collaboration with natural phenomena |
| 7. fortunate mistakes     | 23. ai                                   |
| 8. audience collaboration | 24. distance collaboration               |
| 9. environmental feedback | 25. filling a void                       |
| 10. problem-solving       | 26. elimination                          |
| 11. galumphing            | 27. out of mind                          |
| 12. meditation            | 28. free association                     |
| 13. committee review      | 29. prayer and ritual                    |
| 14. ritual                | 30. using the body                       |
| 15. channelling           | etc                                      |
| 16. exhaustion            |  |

#### G. Collaboration and subversion: descriptive collaboration – Introducing subjectivity through verbal communication

1. "Work together with a neighbour"
2. "Person A secretly paints some simple forms, such as circles, squares, ovals and a few more complex forms with specific characteristics, colours and positions"
3. "Person A will then describe what he wants to have drawn"
4. Person B paints (secretly) what he thinks is being described
5. Compare end result with original

#### H. Collaboration and subversion: Master / Slave

1. "Partner up with the person to your right"
2. "Decide who will be master who will be slave (Really think of this as master and slave,)"
3. "Master will try to force slave to do what he wants"
4. "Slave will try to force some of his creativity onto the process without disobeying"
5. Master should dictate actions and instructions
6. Slave should execute them trying to introduce his own creativity without disobeying master

#### I. The mission to satisfy your unfulfilled self

1. Draw something that represents / fulfils a personal desire (order, freedom, adventure)

#### J. Collaboration and subversion: Misfortune – Using your destructive inclinations

1. "Partner up with the person to your right"
2. "Exchange the "angry circle pictures"
3. "Try to 'ruin' this drawing or change the character of this drawing as much as you can"

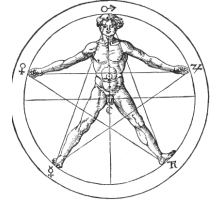
#### K. Collaboration and subversion: Division of Labour

1. "Partner up with the person to your right"
2. "One person is responsible for the outline and composition (use simple elements)"
3. "One person is responsible for colour and additional characteristics"

#### **IV. Greig Missingham: Design Tactics for achieving simultaneity of many ideas**

Headers of exercises:

Contiguous Field; Multiple Exposure or Superposition (including the Palimpsest); Hierarchic (and Heterarchic) Assignment; Symphonic Composition; Narrative and Poetic Synthesis (including Governing Metaphor); Projection Dependence; Suggestive Ambiguity; Knots The Haiku Tactic; Multilayered Focus and Allegory



#### L. Superposition

"Clothing patterns purchased through the mail are often printed in a number of colours – one colour per size of garment or one colour per variation of cut. To save paper, they are not usually printed side by side but one on top of the other. This is Superposition – just like photographic Multiple Exposures" Selective attention is required and invoked.

1. Think of two forms including shape, colour, meaning
2. Think of how these two forms can be superimposed, resulting in a new form, without losing their own identity
3. Think of how this new form can convey a new meaning, or multiple meanings

#### M. Multilayered focus & allegory

Consider the sentence: "RUTH DREW WATER FROM THE WELL". There are many levels of connotative meaning:

A) underdeveloped community relying on wells

C) particular individual

B) Pointing to a historical period

D) another reading: "a soul drew sustenance at the Godhead"

Superimposed, co-present contexts allows sophisticated and rich meanings to be supported.

There are different ways to get multiple meanings, a) using multiple meaning inherent in the form, b) using the creation of multiple meanings by the audience, or c) providing multiple meanings by different contexts. Consider "My heart flew into the clouds", "My heart dropped into my pants". Consider words with multiple meanings, such as: "Bat", "Cover", "Hammer", "Mark", "Point".

1. Think of a noun which has the potential of multiple meanings (Names is an often chosen subject here)
2. Think of an action, which provides multiple meanings when added to noun.

#### **V. Other**

##### B. Additive / Subtractive Synthesis

1. "Write a 2 line poem"
2. "Hand it on to your right"
3. "Add, erase or change the last line"
4. "Hand it on to your right"
5. "Continue until it comes back to originator a second time"

##### C. The poem – Using Symmetry and Freeform

1. "Write a short 4 line poem which is symmetric"
2. "Write a short 4 line poem which is open"