

## **2. SESSION DETAILS**

**DAY:** Sunday, 3/30/2014

**TIME:** 4:00 - 4:25 PM

### **CATEGORY, PRESENTATION FORMAT, LOCATION, TITLE, AND DESCRIPTION:**

Art Education Technology (AET/ISSUES GROUP)

Best Practice Lecture

Convention Center/Meeting Room 23C/Upper Level

**Learning Plan: Art in the Age of Networks - Networks as a Way of Thinking**

Gather strategies to implement and incorporate three curricular units with Scratch, Photoshop and iMovie, that thrive on the role of digital networks as mediators and collaborators for the traditional arts.

### **PRESENTER(S):**

Rabeya Jalil

**Title: Learning Plan for a Curriculum: Art in the Age of Networks - Networks as a Way of Thinking**

30 word blurb:

Learn strategies to implement and incorporate three curricular units with *Scratch*, *Photoshop* and *iMovie* that thrive on the role of digital networks as mediators and collaborators for the traditional arts.

150 word blurb:

The three unit curricular plan is a structural and conceptual framework for an art class that implies and briefly demonstrates the use of three computer software; *Scratch*, *iMovies* and *Photoshop*, to add another layer to (but not replace) the traditional arts. These lessons can be modified to any age group developmentally (Elementary School to University level). The core objectives of the course are to foster collaboration (within humans, materials and disciplines), explore the materiality of the digital media, reflects upon how digital networks as collaborators, mediators and metaphors affect pedagogy and allow students to tailor projects according to their own interests. The young generation, in particular, feels much at ease with the new media so it has become vital and crucial, more than ever, for art educators to learn new art-based computer software, embrace new technologies and integrate digital practices in the classroom to facilitate and enrich students' artistic expression.

## **Learning Plan: Art in the age of network - Networks as a way of thinking**

**By Rabeya Jalil**

**Fall 2013**

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My tech phobia has reduced considerably, thanks to this course and, of course, my instructor, most importantly, who had all the patience to bear my basic naïve questions. My learning curve has been an interesting one; many aha moments. I really wanted to know, before the beginning of the course, what this “fuss about technology was all about”. Not that I got or understood all the answers, but they were enough to tell me that there exists a whole new ‘material’ (as Sean Justice, my Professor calls it) and medium that is excessively being explored and expanded on. There is something about the materiality and physicality of this medium that is very intuitive and instinctive, yet it embodies some very non-human attributes too. Meta learning and thinking is very hard but what is relatively obvious in this discourse of learning through the Art and Technology course is that it has helped me overcome some haunting ideas and barriers about the use of new media and has facilitated a generous space for me to discover some very tiny seeds of pathological fascination in myself through this medium.

Both as a studio art practitioner and an art educator, it has added a new layer of looking at, dealing with and exploring material. Although loaded with my biases (in favor of traditional media), I still really want to and strive to embrace the new media as a layer to the traditional and become more fluent in this new media literacy. I feel that this medium of expression and the language of the code is not a threat to the traditional ways of making and creating, in fact, this new vernacular and its syntax has added an additional layer to art making. One shouldn't feel insecure in its presence, rather try to evolve with it, clasp it and empower oneself with it to whatever degree possible. It is another channel for learning and, ideally, as an educator, one ought to widen opportunities and open as many channels of reflection as possible. The distance travelled from a pinhole camera to the reel camera to the digital camera to the "meta-digital camera" (if there exists one) is long but experiencing the journey is worth every moment.

Learning with Scratch has been like learning a new language, with code as its alphabets. Some codes metaphorically represent letters, some, words and phrases, while others operate as sentences and paragraphs. Hence, depending on their formulation, they create stories, narratives, poetry and novels. I tend to draw parallels of this media with the traditional mediums. In Scratch particularly, the ideas of Movement, Looking, Hearing, Marker, Variations are like the tools and materials of painting for me. They act as brushes, pigments. Within these ideas lie further details of rendering that determine the style of the work. The Script, Costumes and Sounds serve as the matrix or canvas through which all these tools and materials are manifested. The Sprites determine the representational or abstract content and nature of the work. The concepts of sequences, loops, parallelism, events, conditionals, operators, and data collaborate in their respective columns to create different chapters of a narrative or pages of a book of illustration.

My first few attempts to make something in scratch were obnoxious. I couldn't synchronize information together until my instructor helped me deal with my dilemma by giving me real time instances and aided me to visualize what it was like to "broadcast" and "receive" data in Scratch. There had to be a listener for a command in order to bring a task to action.

Brennan & Resnick (AERA 2012, p.23) rightfully stated that “developing as a computational thinker takes place in different contexts, on different timescales, with different motivations, and with different structures and supports” and reflected upon “how these differences lead to different approaches to assessment”. What also resonated with me, in their article, was that the “intersection of computational thinking concepts and computational thinking practices [led] to multiple ways of knowing” (Brennan & Resnick, 2012, p.24) and eventually valuing those multiple ways of knowing was crucial for assessment also. They also said that assessments should investigate these multiple ways of knowing; to grasp the essence of the concepts and then be able to apply them in your practice also to facilitate a design successfully, to explore the ability of debugging problems, remixing, understanding someone else’s code and then applying it to one’s own (Brennan & Resnick, 2012). As I started understanding the concepts and practices of Scratch, I could better understand how others used the various elements of the code and hence was relatively better able to remix it to fit my needs.

Getting my hands dirty was not easy in Html, which was yet another syntax. Thanks to the ideas of remixing and borrowing that I managed to discover some sanity in my work initially. Our professor shared his and some students’ code work with us, which provided me with some sturdy scaffolding to develop my thoughts and learning.

So far, I think I have only superficially felt the tip of the iceberg; many concepts are still vague and unclear. The relevant information seems to reveal itself and hit on me in little packets and bundles one at a time and those bundles gradually have made their respective spaces in the visual “code cupboard” of my mind. The skeletal HTML structure started making more sense gradually; the head, body, its elements (image, link, anchors, class, its sub-divides, divs, headers and paragraphs) seemed like the headings and subheadings of an article or story. Concepts in code sometimes make more sense when I associate everyday practices and metaphors with them, for example, the html environment operates through a browser only if it had its relevant ‘neighborhood’ (index.html, pages folder, images folder, style.css etc.) to support it.

The idea and the open acceptability of remixing, reusing and appropriation in Scratch and HTML were a bit shocking for me initially. (Perhaps this is now an evolving nature and one of the features and attributes for a lot of contemporary performing and visual arts, but not for literary arts/ literature as yet, I guess). The meaning of Plagiarism is certainly changing now. Publishing now is not just getting a few copies of a novel printed through Publishing Company. People so generously publish their art projects online for other people to use and build up from. New rules of accreditation, copyrights and citations are being developed (both organically and inorganically). Programmers receive their due recognition, appreciation and accreditation through the process. Although this concept is still hard for me to digest (to expose your work openly for it to be used by anyone online), this way of creating and feeding, riffing and bouncing off of others ideas has extensively helped me in my learning in both html and Scratch. (Great news for education and pedagogy! .. but not quite sure how much of a burden off educators?! Or an added *expected or unexpected* responsibility for them, especially for the non-tech-savy?)

A matchstick will ignite when sparked, clay with certain properties will vitrify at a high fire, and a matrix of a specific nature in printmaking will print on paper with certain inherent potentialities. Similarly 'Code' has its set of characteristics that distinguishes and qualifies it to be a material for exploration, as my professor very aptly highlights. However, drawing yet more parallels with the traditional materials, this medium, I feel, this material sometimes is more demanding and requires more nitpicking in order to realize an idea; an ignored colon or curly bracket at the end of a code will fail to give you the desired outcome.

It is fascinating to experience some digital network practices to be very intuitive and celebratory of individual expression and the process of thinking and creating. It sometimes even documents the process of trial and error well but not as patiently and humbly as the traditional media I feel; for an everyday digital technology user, what is deleted from "Trash" is almost gone forever. The correct one might replace an

inappropriate code and there might be no trace of the wrong code it, whereas a “bad” painting (unless layered with another one) might remain, at least tangibly. Also, there can be no “right” or “wrong” brushes to make a painting but there certainly can be a “right” and “wrong” code to make an image or animation. This is very debatable though, I understand. The language of the code can be regimented, strict and unyielding if you’re not using the correct syntax. I feel that the time and energy invested in a digital project sometimes does not reflect in the end product and may not represent the degree of learning appropriately, but that could be true even for the traditional media. Hence, assessment about computational development (or even artistic development) and learning (including programming) becomes tricky in some cases. In their article, Brennan & Resnick (2012, p. 23) also aptly state that “what we are most easily able to assess may not be most valuable to the learner”.

As we also discussed in one of our Art and Technology class sessions, one of the most important characteristic of code and its network is its ontological, inherent, radical openness, which eventually shapes the way one might learn to make meaning through this medium. In order to celebrate and cherish the nature of digital networks, one has to learn to trust and believe in language of the system and allow for opportunities for learning from multiple modes and sources.

**Art in the age of Networks**  
**Networks as a way of thinking**

**Curriculum/ Course Outline/ Lesson Plan for one Academic Semester\***

**Student Body:** Sophomore (2<sup>nd</sup> year) or Junior (3<sup>rd</sup> Year) students in an Undergraduate Visual Arts School

**Time duration:** 1 semester

**Structure:** Divided into 4 Theme-based and Material-based Units (with lessons and lesson sequences)

**Objectives**

This learning object is an idea/ plan/ prototype/ framework for a curriculum that

- Fosters Collaboration (within humans, materials and disciplines)
- Explores networked pedagogy and networks in pedagogy as a collaborating force/ agency through and with the Visual Arts
- Explores the materiality of the code and the digital media
- Engages with new media theory and literature

- Reflects upon (and meta-thinks about) how digital networks as a collaborator, mediator and metaphor might affect pedagogy in relation to what will be taught.
- Flexible in approach with plenty of elbow room – allow students to tailor projects according to their own interests
- Could be modified and tailored to any age group developmentally

**Pre-requisites:**

1. Students should be familiar with or have already taken a course about Scratch - a programming language learning environment, created by the MIT Media Lab.
2. Students should be familiar with Photoshop, Apple iMovie
3. Students should have prior experience of digital photography and the use of scanners

**Unit 1: Digital Networks as Collaborators**

**Main Objective:**

Students will learn to combine and collaborate with the traditional and digital media. Students will first create work manually and will later render and treat it with the digital media; in Photoshop, through a scanner and in Scratch, etc.

**Activity and goals:**

1. Introduction to Scratch
  - a. Play around, tinker in Scratch
  - b. Scratched resources
  - c. Introduce the idea of remixing
2. Make rubbings (using paper, pencils, crayons and pastels) of natural and man-made materials (leaves, bark, pebbles, brick, walls, twine, threads etc.), scan various materials or tangible textures (fibers, laces, net, sandpaper etc.) or photograph different surfaces to achieve various textures to as the raw material to render in Scratch to create a code animation/ code poem.
3. Make sketches/ drawings/ collages to use in Scratch to create a code animation/ code poem
4. Create an “About Me” project as a code animation/ code poem

**Materials Used:**

Colored crayons, magazines, charcoal, pencils, white drawing paper, Scratch software, computers, scanner, Adobe Photoshop

### **Transition into Unit 2:**

Bring one or more images, photographs, cut outs, art work, videos, documentaries, webpages, films, excerpts, clippings or advertisements that reflects your interests, intrigues you, fascinates you or disturb you.

## **Unit 2: Collaborative Learning** **Digital Networks as Collaborators**

### **Main Objectives:**

1. They will learn to combine and collaborate within various kinds of materials; with the traditional and digital media. Students will first create work manually and will later render and treat it with the new media
2. Learn to collaborate within two programs/ departments/ specialties, experience multidisciplinary collaboration
3. Learn to work in groups and share resources

### **Materials Used:**

Optional traditional media: acrylic paint, tempera, charcoal, pencils, glue, brushes, and a variety of paper (tissue paper, construction paper and magazine clippings), clay, cardboard, found objects, toys, dolls or any other materials

Optional digital media: Computers, Scratch software, computers, Apple, Flash, Dreamweaver, iMovie, Scanner, Adobe Photoshop, digital still camera, video camera

### **Activities and goals:**

1. Open discussion/ Opening exercise: Let's think of and discuss the ways in which collaboration can happen organically (in nature) and inorganically (man-made).
2. In groups of 3 or 4, students will create 2 or 3 dimensional tangible / traditional forms or compositions through traditional materials and found objects and then transform or render the artwork through the digital media with the help and resources of the new media department and digital technologies department.
3. Discuss and deconstruct the image, video, documentary, webpage, website, film excerpt, clipping or advertisement that intrigues, fascinates or disturbs you.

4. How would you respond to them?
5. As a response to your digital material, how might you visually articulate your thoughts and concerns by making a 2 or 3 dimensional composition; installation, collage or bricolage through the material of your choice (acrylics, tempera, clay, fiber, plasticine, play dough, bubble wrap, music/ songs cardboard, packing material, illustration, found objects, toys, dolls, materials from popular culture, acrylics, magazine cuttings, construction paper, printmaking, pastels, etc.)
6. Once the form is created, how would you further treat it or render it to make a video, game, performance, music, dance, play/ theatre, blog, website, code poem, animation, bricolage (with photographs, images or any with digital media), images, stop motion animation/ video, gif etc.

### **Transition to Unit 3:**

Bring/ discuss a cultural object, ritualistic object, popular/ material cultural icon, toy, anything from your material, visual and popular culture that has a personal and/ or communal significance in your life

## **Unit 3: Digital Networks as Mediators**

### **Main Objectives:**

1. Learn to collaborate within two programs/ departments/ specialties, experience multidisciplinary collaboration
2. Learn to work in groups from across disciplines and share resources
3. They will learn to collaborate with, combine and connect various kinds of materials; with the traditional and digital media. It will be the reverse of the previous sensibility; students will first create work digitally this time and will later render and treat it manually/ outside an interface/ in the traditional media

### **Materials Used:**

Optional digital media: Computers, Scratch software, computers, Apple, Flash, Dreamweaver, iMovie, Scanner, Adobe Photoshop, digital still camera, video camera, music/ songs, HTML, Text Wrangler, CSS, tumblr, vimeo, Hex Fiend

Optional traditional media: tempera, acrylics, charcoal, clay, fiber, plasticine, play dough, bubble wrap, cardboard, packing material, found objects, toys, dolls, materials from popular culture, acrylics, magazine cuttings, light box for tracing, construction paper, printmaking, pastels, printmaking, sculpture, collage, glue, brushes, and a variety of paper, tissue paper, construction paper and magazine/ newspaper clippings, clay, cardboard, found objects, toys, dolls or any other materials

Other mediums of expression: Performance, dance, music, play, theater, poetry, narrative, story

**Activities and goals:**

4. Discuss the cultural object, ritualistic object, popular/ material cultural icon, toy, or anything from your material, visual and popular culture that has a personal, communal significance in your life.
5. How would you respond to it?
6. Discuss and see Artists' works El Anatsui, Rishan Syed, Faith Ringgold, Laylah Ali in "Power", Pepon Osorio in "Place: No Crying in the Barber Shop", Susan Rothenberg in "Memory", Sarah Khan, Rashaad Newsome, Stephen Wilson, Amra Khan "Paint My World", Ferwa Ibrahim (after sharing ideas and feeding off from each others thought processes)
7. How might you visually or verbally (poem, narrative, phrases) articulate your cultural object/s (or anything else you wish to work with or include) that have cultural significance for you? They could be celebratory customs, rituals, traditions, religious events and practices or ceremonial activities.
8. How might you visually articulate your thoughts and concerns by photographing, printing digitally in 3-D or 2-D, making a video, taking a piece of music/ song, dance, documentary, film, drama, website, code poem, animation, stop motion or gifs etc. that relates or responds to your cultural object?
9. Students will learn to make connections across different mediums.  
After creating their digital forms, they will render and visually articulate those works to create an installation, a stop motion video by physically manipulating the 3-D printed objects, a performance piece, a performative space, zines, text based installations, bricolage, sculpture, illustration, an object of utility (a dress, a curtain, a chair, table etc.), a collage with the physical 'you' in it (like a projection onto yourself), printed images, quilt, curtain, mat, rug, altar (or anything hanging, floating, standing, moving on the wall/ floor/ ceiling) or a series of photographs that convey personal narrative or a celebration.
10. Curation of works, documentation, display, critique and reflection
11. Official display in campus space if possible

**Transition to Unit 4:**

Handout readings for the next Unit.

**Unite 4: Networks as Metaphors**

**Main Objectives:**

1. An open-ended, student-centric and broad based approach to learning and creating
2. Encourage critical thinking, independent decision making
3. Allow to chose their own nature/ track of projects

### **Materials or mediums Used:**

Optional digital media: Computers, Scratch software, computers, Apple, Flash, Dreamweaver, iMovie, Scanner, Adobe Photoshop, digital still camera, video camera, music/ songs, HTML, Text Wrangler, CSS, tumblr, vimeo, Hex Fiend

Optional traditional media: tempera, clay, fiber, plasticine, play dough, bubble wrap, cardboard, packing material, found objects, toys, dolls, materials from popular culture, acrylics, magazine cuttings, light box for tracing, construction paper, printmaking, pastels, printmaking, sculpture, collage, glue, brushes, and a variety of paper, tissue paper, construction paper and magazine/ newspaper clippings, clay, cardboard, found objects, toys, dolls or any other materials

Other mediums of expression: Performance, dance, music, play, theater, poetry, narrative, story

### **Activities and goals:**

1. This is an very open-ended and broad based approach to learning where students will have the option to create a project; a space, object, form installation, performance, music, dance from a variety of media/ medium or just one medium alone. They may also choose to work independently, in groups or in groups across disciplines.
2. Open discussion and dialogue to trigger off, instigate and generate ideas
3. Curation of works, documentation, display, critique and reflection
4. Official display in campus space if possible

### **Themes for open-discussion:**

1. Deconstructing the meaning of networks as metaphors
  1. What is a metaphor?  
Discuss our usage of traditional/ tangible technologies in everyday lives (pencil, chair, zipper)
  2. What are networks? Think about and discuss digital, social and biological networks
  3. Rethinking of contemporary social networks through collective, emergent artistic activity
  4. Discuss 2 readings (given prior to the class session)
    - a. *Prolegomenon: We're tired of tress*, Galloway & Thacker (2007)
      - Sovereignty and networks
      - Sourcing the nonhuman within the human, connectivity as a threat

- Topology
- b. *A Critical Digital Pedagogy for an Age of Social Networks*
- Freewayblogger - Robert W. Sweeny
5. exploring urban spaces/ public places as networks
  6. Online social networking: Facebook, YouTube and Flickr, Social media as networks
  7. Biological networks: neurons, epidemic
  8. Metaphors of remixing (from last two units)
  9. pencil as a networks, gossip as a networks, talking/ hearing, body gestures as networks
  10. Chinese whispers (activity)
  11. Will discuss a few artists' works: El Anatsui, Rishan Syed, Faith Ringgold, Laylah Ali in "Power", Pepon Osorio in "Place: No Crying in the Barber Shop", Susan Rothenberg in "Memory", Sarah Khan, Rashaad Newsome, Stephen Wilson, Amra Khan "Paint My World", Ferwa Ibrahim (after sharing ideas and feeding off from each others thought processes)
  12. Lord of the Rings fire signal clipping (Sean Justice)
  13. Digital artist: Pinterest.com/ Sean Justice

### **Bibliography/ References**

- Castro, J. C. (2012). Learning and Teaching Art Through Social Media. *Studies in Art Education*. (53)2. 152-169.
- Galloway, Alexander & Thacker, Eugene (2007), *Exploit: A Theory of Networks*, "Prolegomenon: We're Tired of Trees" pp. 1-22. (Minneapolis: University of Minnesota Press 2007)
- Lai, A. (2012). Culturally Responsive Art Education in a Global Era. *Art Education*. 65(5). 18-23.
- Lankshear, Colin & Knobel, Michele (2006), *New Literacies: Everyday Practices and Classroom Learning*, 2nd Edition (New York: McGraw Hill/Open University Press 2006).
- Lee, N. (2012). Culturally Responsive Teaching for 21<sup>st</sup>-Century Art Education: Examining Race in a Studio Art Experience. *Art Education*. 65(5). 48-53.
- Peppler, K (2011), *New Opportunities for Interest-Driven Arts Learning in a Digital Age: A literature review, commissioned by the Wallace Foundation, 2011*

Sweeny, R. (2013). A Critical Digital Pedagogy for an Age of Social Networks. In K. Tavin and C. Morris [Eds.]. *Stand(ing) Up, for a Change: Voices of Arts Educators*. (pp.128- 136). Reston, VA: National Art Education Association.

**Some Blogs and websites:**

[http://www.patriciaanders.com/?category\\_name=art-dolls](http://www.patriciaanders.com/?category_name=art-dolls)

<http://www.alteredbarbie.com/users/candi33>

<http://www.alteredbarbie.com/artwork/saddle-barbie-campaign-trail>

<http://www.freewayblogger.com/>

<http://www.chinh.in/>

<http://scratch.mit.edu/>

<http://scratched.media.mit.edu/>

<http://vimeo.com/19408116>

<http://pinterest.com/seanjustice/>