Teaching Complexity: Complexity and Creativity
19.02.19 / 1500

Dave Cormier
Manager, Schulich School of Medicine, Windsor Campus
Rhizomatic Learner
Internet person
@davecormier

Tobias Revell
Programme Director, Graphic Design Communication, London College of Communication, UAL
Director, Supra Systems Studio
Director, Strange Telemetry
Curator, Haunted Machines
Pretty passable digital artist
@tobias_revell
TEACHING COMPLEXITY
Complexity and Creativity #teachcomUAL
Teaching and Learning Exchange

David White, Head of Digital Learning - @daveowhite
https://tinyurl.com/y8ddkg7k
## Blackboard Collaborate Ultra - basics:

### Setup your audio and video

- Click the **purple icon** to expand control panel.

- Click the **settings cog** icon.

- If required, expand the *Audio and Video Settings* section and click the *Set up your camera and microphone* link.

  Once configured use these buttons to turn on/off your microphone and camera:

### Collaborate basics

- Click the purple icon to expand control panel.

### Chat

### Attendees List

- (if granted by meeting organiser)

### Share Content

### To leave the session

Just close the browser tab/window.
Questions and reflections:

http://teachcom.myblog.arts.ac.uk comments

#teachcomUAL - Twitter
Premise

Simple and Complicated challenges are solved. Complex problems can only be confronted creatively.
Designing for complexity
(a goal for learning)
SIMPLE
Simple Problems

1. Easily measured
2. Does not require subject matter expertise
3. Fix it by DECIDING.
COMPLICATED
void loop() { // do it over and over and over again

  buttonFeelings = digitalRead(buttonBlue); // did you press the button yet? d

  if (buttonFeelings == HIGH) { // if button is pressed
    digitalWrite(ledPin, HIGH); // light turns on
    {
      for (coffeeChickpeaPosition = 0; coffeeChickpeaPosition <= 180; coffeeChickp
coffeeChickpea.write(coffeeChickpeaPosition); // change the p
delay(15); // wait a little bit
    }
  }
}
Complicated Problems

1. More difficult to measure
2. Sometimes more than one solution is possible
3. Requires subject matter expertise
4. Lean Six Sigma
Lean Six Sigma: DMAIC

Define
Define the problem.

Measure
Quantify the problem.

Analyze
Identify the cause of the problem.

Improve
Implement and verify the solution.

Control
Maintain the solution.
Complicated educational challenges
Please write on this slide.
COMPLEX
Complex Problems

1. Not directly measurable
2. Does not have a solution
3. Can only work on part of the problem
4. Fix it with people
complex educational challenges
Please write on this slide.
Complicated or complex?
To what purpose?

Simple/Complicated
- Clear learning objectives
- Certainty
- Student as follower

Complex
- Learning ecosystem
- Uncertainty
- Student as collaborator
If you could count learning like you can count money
Creative approaches to complex educational things
Please write on this slide.
Ethics - Ideology:

Community

Openness - reuse - recordings

Creative Commons, Attribution
Diervilla, Hortus Cliffortianus — Georgius Clifford (Georg Dionysius Ehret) — 1737
The utopian, immanent, and continually frustrated goal of the modern state is to reduce the chaotic, disorderly, constantly changing social reality beneath it to something more closely resembling the administrative grid of its observations.
There is no way of framing ethical, political, and philosophical questions that would not also have to be a matter of techne, technique, or technesis, and so would not have to be imagined mechanically.

Dream Machines – Stephen Connor – 2017
We are stuck with the problem of living despite economic and ecological ruination. Neither tales of progress nor of ruin tell us how to think about collaborative survival.

... Imagining the human since the rise of capitalism entangles us with ideas of progress and with the spread of techniques of alienation that turn both humans and other beings into resources. Such techniques have segregated humans and policed identities, obscuring collaborative survival. The concept of the Anthropocene both evokes this bundle of aspirations, which one might call the modern human conceit, and raises the hope that we might muddle beyond it. Can we live inside this regime of the human and still exceed it?

The Mushroom At The End of the World – Anna Lo – 2017
Pace Layering


Pace Layering – Stuart Brand – 1999
#2019 Problems: How to urgently help learners contextualise their practice and research in systems of ten-thousand year, planetary scales when they're surrounded by speed and individualism?
KEEP THE CONVERSATION GOING!
Questions and reflections:

HTTP://TEACHCOM.MYBLOG.ARTS.AC.UK
COMMENTS
#TEACHCOMUAL - TWITTER

Next session February 26th 3pm GMT with Sheldon Chow & Matt Lingard: Digital Fieldwork 2

https://teachcom.myblog.arts.ac.uk/digital-fieldwork-2