

<MAKERSJAM SCHOOL COLLECTIVE>

THE
POST
-DIGITAL
SCHOOL

<h1>MAKERSJAM SCHOOL COLLECTIVE</h1>

The MakersJam School Collective is a speculative school, situated in a post-digital space eluded to in earlier sections.

We are an experimenting community positioned in a fictional space where 'what ifs' are given room to grow from imagined possibilities. Previously 'black-boxed' systems are opened and re-thought through making.

From the security of not yet existing, our school is free from institutional restriction and political situation. It is a liminal space, which occupies the threshold of what could be.

MakersJam School Collective explores a theoretical discourse, namely Digital; Shifting Perspectives; Agency-Embracing Imperfection; Mixed Media Multimodality, and poses to fill the rupture in space between discourses in art & design and primary/middle school education in terms of media & technology education and criticality.

You are encouraged to move between this positioning of our school and the previous documentation presented here as you consider your application for the above position of: Post-Digital Learning, Technology and Media Educator.



fig. 01.01 Monumental Structure, Delft (2019)

<p>DIGITAL</p>

Digital relates to things divided into smaller, identifiable parts or as Cramer (2014) notes, "something is divided into discrete, countable units – countable using whatever system one chooses, whether zeroes and ones, decimal numbers, tally marks on a scrap of paper, or the fingers (digits) of one's hand."

Rushkoff (2010) supports this notion in, 'Program or be Programmed, Ten Commands for a Digital Age' where he offers ten simple commandments as a means of taking ownership and building agency. By discussing the biases of digital media, he suggests how to balance these biases in both physical and virtual worlds. In an interview with Jason Cranford Teague for Wired magazine (2011), he noted, "I picked ten because there's ten fingers — ten digits. I wanted people to remember what digital really means: productive, using your fingers, human-scaled."

Cramer (2014) continues that, "Conversely, 'analog' means that the information has not been chopped up into discrete, countable units, but instead consists of one or more signals which vary on a continuous scale, such as a sound wave."

With this in mind, post-digital could be thought of as post-digits or post-handmade or possibly without hand at all. This translation of meaning leads to conflicts and biases inherent within the word digital. Quite possibly referring to a rejection of the digital and a return to handmade or "a return to hands on, authentic experience, but not necessarily restricted to purely digital realms."(Cramer, 2014)

Post-digital points to a shift in perspective that rejects or at least is critical of the perceived bias held within education suggesting an openness toward media and (new) literacies whether digital or otherwise.

The MakersJam School Collective, asks its educators to critically make curriculum together.

<p>SHIFTING PERSPECTIVES</p>

Levien Nordeman (2012) writes in *Craft as a Lifestyle*, "In a survey conducted by Aldje van Meer (2012), art and design students in the Netherlands were asked about their use of digital media, as well as their specific skills and attitudes. Students acknowledged the possibilities of digital media for enhancing or presenting their art or design work, but, at the same time, largely favoured conventional media such as fabrics and paper: They mostly agreed with the statement that they, 'would rather design a poster than a website.' (Van Meer, 2012)."

On reflection and based on observations in practice with school, I experimented with this idea. I illustrate here, differing opinions and perspectives and additionally highlight the biases held by students and educators. These experimental findings are presented below.

(The educators in this experiment work with children aged 3 - 15 years within formal and non-formal learning settings)

- I'd rather use a blackboard than an interactive whiteboard.
- I'd rather read a real book than a tablet e-reader.
- I'd rather draw with chalk than write (code) on a computer.
- I'd rather kids learn to play a real instrument than play computer music.
- I'd rather download ready made posters than make my own.
- I'd rather check Instagram on the train than look out of the window.
- I'd rather make notes with pen and paper than in Google Docs.
- I'd rather hand-write than type.

These often binary distinctions leave little space for convergence and choice of media, particularly for young learners within a school. The policy choices in education directly impact the choices or at least perceived choices of learners in school.

By playing it safe - as a teacher you default to existing habits and preferences. You are modelling the very behaviours that you require your students to escape from.

Replace 'I'd rather' with 'I am happy to' shifts thinking and creates new possibilities.

e.g. I'm happy to design a poster on a website.

I'm happy to draw code with chalk.

I happy to combine real instruments with computer music.

This play on words suggests combining these polarised choices to create new perspectives. To make this possible, opportunities for combinations of ideas and interdisciplinary approaches to pedagogy are born out this 'hacker-educator' mindset that has a lens of possibility. An approach which models tinkering with systems and opens a door for young learners to do the same hence, building environments of agency. Ones which sees both educators and learners as critical makers of curriculum.

<p>AGENCY-EMBRACING IMPERFECTION</p>

Referring back to the notion of agency; “the capacity to act reflexively, meaningfully, and responsibly.” (Barnes, 2001). Cramer (2014) argues that the very notion of agency is fictitious. In his chapter entitled, ‘The desire for Agency’ in ‘What is Post - Digital?’ he writes, “For (Van Meer), the main reason why art students prefer designing posters to designing websites is due to a fiction of agency – in this case, an illusion of more control over the medium. Likewise, ‘digital’ cultures are driven by similar illusions of free will and individual empowerment”.

At the MakersJam School Collective we embrace imperfections and encourage educators and students to make mistakes. Acknowledging these imperfections begins a process of iteration of ourselves as unfinished lifelong learners whom seek to constantly refine their craft.

If we see ourselves as prototypes and beings whom through constant reflection are iterating their very existence then we begin to challenge the fictional notions of agency.

We become the cartographers rather than mere map readers.

This constant cycling of agency, wonder, curiosity and risk creates moments of personal growth and engagement. As we construct and iterate ourselves and our ideas, we do this surrounded by artefacts and objects. A post-digital school recognises this by combining often viewed old and new media as a mean our providing new ways to think about and express ourselves and indeed (re)defining our relationship with these materials.

Our school collective, as suggested by the above job description, encourages educators as Levien Nordeman (2012) suggests, “to open up the “black box” of older, analog technologies, such as LPs, analog cameras and cassettes, as well as their accompanying infrastructures (record stores, record companies), patterns of distribution, language and aesthetics.”

Seymour Papert’s theories on constructionism positioned themselves in a post-digital domain long before the ‘post’, offering an perspective about how the computer could transform how learners think and express themselves. He suggested the opening of the “black box” pointing towards the materiality of the code within the program and as with Nordeman’s suggestion, opening a dialogue around agency within infrastructures, networks and systems. Multimodality offers a different perspective of ‘objects to think with’ (Papert, 1980) and suggests, as noted above, a move away from the biases of digital versus analogue to a mixing or remixing of media as a way of constructing learning and knowledge.

<p>MIXED-MEDIA MULTIMODALITY</p>

Seymour Papert suggested that learners engage with physical construction as a means of gaining instruction. He was interested in how learners engage in conversation with the artefacts under construction. In his book, 'Mindstorms. Children, Computers and Powerful Ideas' Papert (1980) he suggested that, "All builders need materials to build with... attribute(d) to the surrounding cultures as a source of these materials."

Papert, rather than view the computer as deliverer of information, envisaged the following:

"...the child programs the computer and, in doing so, both acquires a sense of mastery over a piece of the most modern and powerful technology and establishes an intimate contact with some of the deepest ideas from science, from mathematics, and from the art of intellectual model building." (Papert, 1980, p3)

This notion of building ideas resonates with post-digital discourse moreover suggests learners expressing themselves through multimodality with a distinct choice of multiple forms of media.

Mitch Resnick of MIT's Lifelong Kindergarten furthers the ideas of Papert by stating that constructionism has four key elements often referred to as the Four P's of Creative Learning.

These are projects, peers, passion and play. Importantly, Resnick emphasises playful experimentation, tinkering with materials and testing ideas as extremely valuable to learning. Within the role of post-digital educator, being able to choose the right tool for the right job is paramount. To be able to build narratives around appropriate media,

through experimentation with a range of materials suggests multimodality and a convergence between analogue and digital media. With choice, learners will begin to make new connections and redefine ways of making meaning through these hybrid artefacts.

Rowsell (2013) defines multimodality as the field of research that takes account of how individuals make meaning with different kinds of modes. "Meaning making occurs whether we use traditional, paper-based texts or digital, multimodal texts and the level of meaning will vary according to our purpose and the text genre."

Multimodal inquiry refers to meaning making through an open-ended exploration with various modes. The positioning of ones-self in space, within mixed media representation, knowledge construction and modelling, represent a multimodal inquiry. Such an inquiry suggests a post-digital perspective of meaning making where dichotomies between digital and analogue media are challenged when learners have a fluid choice of modes to inquire within and, an open choice of mixed media to express themselves with.

Kress (2010, p. 162) explains how modes can work harmoniously to convey meaning through "orchestration," which involves "assembling/organizing/designing a plurality of signs in different modes into a particular configuration to form a coherent arrangement," resulting in "ensembles," or the product of such orchestration.

It is my position that multimodal inquiry involves an assemblage or collection of different modes of inquiry which work together to provide meaning, revealing different perspectives and new understandings. This dialogue between learner, perspectives, modes and media, it is hoped, would lead to a greater agency for the inquirer.

Nordeman continues, "'post-digital' eradicates the distinction between 'old' and 'new' media, in theory as well as in practice."

The following example highlighting this point, "Kenneth Goldsmith notes that his students "mix oil paint while Photoshopping and scour flea markets for vintage vinyl while listening to their iPods" (Goldsmith, 226)... Young artists and designers choose media for their own particular material aesthetic qualities (including artefacts), regardless of whether these are a result of analog material properties or of digital processing. Lo-fi imperfections are embraced." Nordeman (2012)

In the desire to redefine and uncover new relationships with technology we create opportunities to redefine ourselves and relationships with materials and how to express ourselves. To do this our post-digital school offers diversity and choice in both the environment within which we work and the media we choose to work with.

"When hacker-style and community-centric working methods are no longer specific to 'digital' culture (since they are now just as likely to be found at an 'analog' zine fair as in a 'digital' computer lab), then the established dichotomy of 'old' and 'new' media – as synonymous in practice with 'analog' and 'digital' – becomes obsolete, making way for a new differentiation: one between shrink-wrapped culture and do-it-yourself culture." (Cramer 2014)

MakersJam School Collective challenges some of the 'shrink-wrap' culture proposed by education presently and calls for a radical approach to critically making school.

"(We learn) how technology is grown by humans and how are we connected to technology"

(Student, MakersJam School Collective, 2019)

"If we have a fictional idea- we try and make it happen in a more realistic way- (make it become reality)"

(Student, MakersJam School Collective, 2019)

VOICES OF STUDENTS

From MakersJam School Collective as they reflect on their learning in school.

" (Our school) gives us different perspectives of the world"

"(It) help us to zoom out and see things in a different way"

"We see things differently- invisible footprints not normally seen."

"(An educator here) doesn't want to be a (specifically a) 'teacher' but more like a leading student."

At our school, "we can learn about each other and grow our knowledge of technology."

ORIGINS OF THE 'MAKERSJAM SCHOOL COLLECTIVE' NAME

"**MakersJam** is a group of (critical) makers gathering to make stuff together, bringing ideas to life, to think through their making together."

"Mix things up that people don't normally go together"
(Student, AfterSchool Club Art & Code, 2016)

"Create something amazing that people don't normally associate together."
(Student, AfterSchool Club Art & Code, 2016)

A jam is "the freedom to play whatever you feel like playing by listening to others"
(Pardo, J.F., 2016)