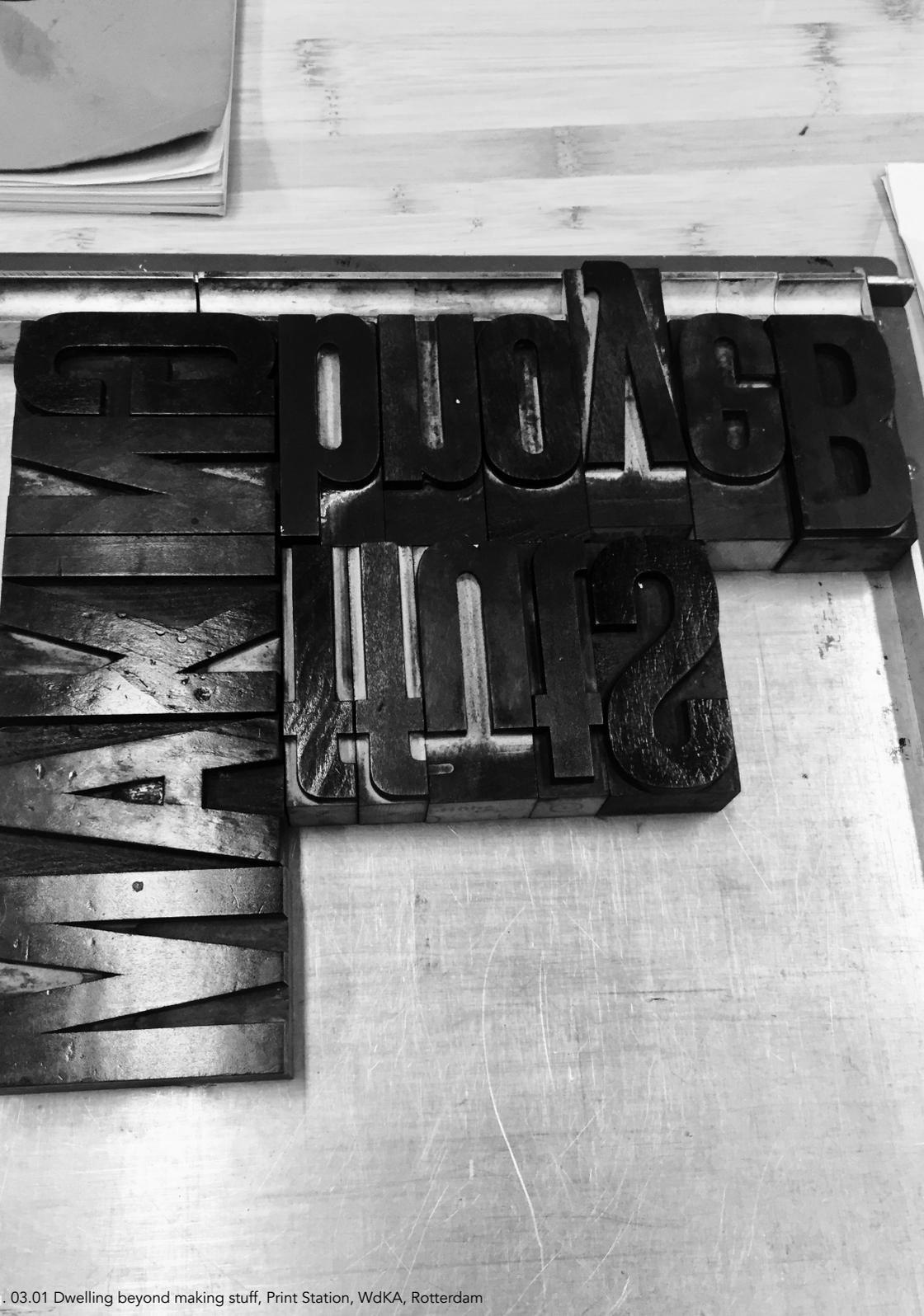


CONCLUSIONS & FUTURE IMPLICATIONS



[EVOLVING TACTICS]

[a living - non-static - interconnected - non-linear framework]

To begin the conclusion to this practice based research project I focus on a workshop I facilitated, entitled, "Open Web - An exploration through digital/analogue mixed-media."

International School educators were invited to complete a short questionnaire in response to the workshop. Alongside a collaborative archive of digital photographs and physical artefacts, the feedback highlighted how the workshop challenged participants with pedagogical and didactical approaches more so than the 'content' of the explorations.

The workshop expressed a tactical blend of media, open-ended inquiry, use of learning space and outdoor environmental learning as theorised and practised throughout this body of work. This and the planned 'thinking' space and tangential inquiry modelled a pedagogical approach which provided a framework for inquiry which I believe to be often absent from professional learning experiences: a tactical pedagogy.

I underline evidence of evolving tactics and a possible modified code, bringing these into the side notes for future reflection.

Two questions were posed to participants relating to action and changes in thinking.

What in one 'takeaway' you are going to act on?

What questions or wonderings do you now have?

Responses follow below each question.

What in one 'takeaway' you are going to act on?

1. Start with a 'physical inquiry' even when you are going to complete or carry out the inquiry online.
2. #spaziergangswissenschaft and the physical internet
3. Work less with digital tools depending on the task. Tangible objects (books, paper, yarn, string, paint...) can help students produce something that then can lead into a digital tool, or not.
4. Looking at how we view the internet and getting involved in things with fresh eyes
5. Bring the art of creation into my classes and see how it generates different discussion.
6. Benefits of combining an engaging prompt with visible thinking routines
7. Question everything. Learn more about how the internet physically works, check out the Mozilla project in more detail.
8. Great workshop. Useable ideas and I loved being given the space to think and explore ideas. Also great to have some space outside.
9. Creative and hands on. A good combination. I will use this with kids.
10. The value of kinaesthetic knowledge, even if it is outside our comfort zone.
11. Use of physical maker activities to demonstrate understanding
12. Alternative ways to implement digital citizenship lessons.

physical inquiry

spaziergangswissenschaft

physical internet

less with digital

tangible objects

art of creation generate s
different discussion

question everything- be
critical

space to think and explore
ideas- disrupt rhythms

kinaesthetic knowledge

physical maker activities

d e m o n s t r a t e
understanding

digital citizenship

What questions or wonderings do you now have?

1. How do we get students to become more capable problem solvers?
2. I wonder how I could build learning walks into more of my students' learning?
3. Where we go with the idea of internet and its origin, uses, future options... how to we make sure we are asking questions, especially those that we can answer with our students.
4. Where do we go from here? Whats next?
5. What are my next steps? How will I used this discussions and ideas we have generated today.
6. Effective ways for developing engaging prompts?
7. again--how does internet work...how can we promote the open web and equal access
8. How to physical problem solving/idea generation it without making seem forced in? I need to get more confidence in thinking outside the box?
9. How can I more deeply understand how the Internet works?
10. How to integrate this into a language arts class?
11. How can I break conventions in my own school situation?

Other comments

1. The session has encouraged me to flip learning and approach the lesson from another perspective.
2. Mark is a positive influence and allows participants to move the discussions, depending on where it is going. Adaptable.
3. I like the thought-provoking conversation and openness of thinking

learning walks

Developing Engaging Prompts- Interdisciplinary Provocation

open web and equal access

Physical Problem Solving/Idea Generation

Integrate This Into A Language Arts

Break Conventions In My Own School

Encouraged Me To Flip Learning

Another Perspective

Allows Participants To Move The Discussions

Thought-Provoking Conversation

Openness Of Thinking

CONCLUSION & FUTURE IMPLICATIONS

The critical art of inquiry provided a point of departure for the collection of tactics proposed and elucidated upon in this body of work. Each tactic highlights the observed lens of physical co-construction of learning through making, shown here in its many forms with environmental exploration, positioned here as wayfaring and the found moments of situational reflection.

The non-linear nature of the work responds to the rhizomic fibres binding each tactic, held between the interconnected threads of post-digital space. Wayfaring here can be seen here as both material and spatial. Notions of theory were born directly out this practice based research, responding directly to these acts of making.

The methodology of thinking through making is a living, non-static, interconnected framework which requires constant remixing and reinterpretation. In each case, 'ways of listening' were captured through a collection of experiments and formulated a tactical approach to the critical making of learning and curriculum which calls for, "young people (and the educators learning alongside them) to be present during making, to grasp the changing nature of making work, these practices and ways of being (that are) well beyond the ambit of language and cognition". (Rowell & Shillitoe, 2019)

"The possibility of resistance offers somewhat more hope... people find a way to make do and even flourish. So perhaps we ought to be asking whether there remains a space for tactics in the drive toward total automation, the eclipse of human discretion and the transvaluation of all the values that gave rise to everyday life as we recognize it. (Greenfield, 2017, p. 254)

As stated in earlier sections of this thesis, critical making encompasses any practice between making and criticality where the following expressions of each path taken, shared a common thread of how thinking unfolds for the co-makers of learning and curriculum.

By addressing knowledge construction of abstract conceptual understandings and complex systems through a multitude of modes, each tactic collectively addresses learner agency. The assemblage of learning and flipping of a systematic ways of instruction, materialised by being present within actual environments and 'walking' within them.

A methodology of open-ended inquiry challenges current educator mindsets and perceptions of the role of what an educator is and could be. As the section of the post-digital school suggests, certain assumptions are both made and are required to be met in order to address the roles of mentor, coach or teacher.

As a critical maker of curriculum, the ruptures or disruptions to practices create situations for reflection which move from mere projects to potential movements of change where both educators and young learners are empowered to have influence over the directions and impulses of their learning inquiries.

Within current trends of maker education, as with many educational trends there is the tendency for policy to dictate the need to 'include' these

trends within the traditional classroom. 'Maker' initiatives become bound within an established ethos of the school where, unless the school environment fully embraces the philosophies and practices, there is a danger of policy becoming another fading trend.

I conclude that maker pedagogy is engrained within concept driven, inquiry based, constructivist pedagogies. To become fully embedded within school settings, practices need to be authentic, multimodal and student initiated. Educators need to have the freedom to experiment with different approaches to learning, have the agency to challenge accepted norms and systems within a school and, defend the rights and voices of their students. In essence, they need to be able to act within their learning environment together with their students to effect change however small and short lived.

Future research will further guide the impact of such forms of micro activism on the lives of students and their lived learning experiences.

In considering these future implications for research I propose the following questions:

Is there a counter culture in education?

Are there other educators working in a tactical nature?

There is a perceived urgency to act but is it worth the struggle?

Will such a tactical approach ultimately fail in contemporary networked society?

How much agency do students and teachers reasonably expect to have?

Lastly, dissensus as interpreted here in this educational project is confronting. It brings the voices of learners to the foreground, unsettling established patterns of practice which ultimately calls for increased dialogue between individuals.

In an unfolding networked society the fibres of the code in these voices may shift and the threads of technology evolve however, referring back to the suggestion of conviviality; the potential of an open, networked society where citizens are empowered to have greater control through community centred interaction, could be equally applicable to learning communities.

Adam Greenfield (2017) in *Radical Technologies: The Design of Everyday Life*, considers conviviality as the, "ways of being human unbound by the tangible and intangible shackles that so often constrained those who came before us. These are the seeds of possible futures, seeds that with effort and care might yet be grown into a wiser, more considered, more just and generous way of living together upon the Earth."

He continues, "Even if just barely, then, like the ghostly patterns of data left behind on an imperfectly erased hard drive, our arrangements of the world bear traces of lifeways that were founded in solidarity and neighbourly conviviality, and an everyday life that was more spacious and tolerant of imperfection." (Greenfield, 2017, p. 257)

The tactical pedagogies suggested in this thesis provide paths to uncovering and unravelling these lifeways of everyday life.