

STARTING WITH WHAT
WE DON'T WANT:
A PHYSICIST'S APPROACH
TO THE CLIMATE CRISIS AS
A FRAMEWORK FOR
RETHINKING EDUCATION

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The current situation at the heart of this special issue calls for action on all levels. We live in a world beholden to an economic principle that is presented as without alternative, yet that will ultimately cause the destruction of the very ground we stand on.

Education is called upon to save us by producing a new generation of thinkers and solution-finders that will solve our current crises in the nick of time. Yet we as educators struggle to think beyond the confines of the neoliberal logic that currently governs education. Lack of innovation, enthusiasm, or commitment are attested to us, but such a focus is extremely limited. We are caught in a system of relentless testing mechanisms to measure 'best practice', and we'd do well to ensure that our students pass muster by teaching to the test. To window-dress this problematic status quo with a veneer of creativity, blog posts such as *The 20 best ideas to do _____ (insert freely!)*, the latest government scheme of work, or the newest programme for teaching Phonics crowd our inboxes and judgements. Vehement critics of the neoliberal system exist

(see for example Ball, 2016; Giroux, 2015; Zhao, 2020), yet struggle to break its global stranglehold.

Education As It Stands Will Not Save Us. But What May?

Reading a recent interview with Anders Levermann, professor for climate dynamics at Potsdam Institute for Climate Impact Research and a scholar at Columbia University, sparked my personal utopian vision for how to rethink education. As a physicist, Levermann studies climate change phenomena. In an interview with German weekly newspaper *DIE ZEIT* (Heuser 2021), Levermann draws on a well-known principle of physics: clearly defining the borders of the system and then allowing the forces of innovation to most effectively navigate the resulting space. Levermann posits that stating a negative delineation clearly will make creative solutions possible, whilst maintaining the necessary boundaries inscribed in a fragile ecosystem threatened by disequilibrium.

Put very simply, Levermann's idea is this: let's name clearly what we reject, and allow educators worldwide the freedom to move in the space that is thus created. Let's not start with learning outcomes, performance targets, or projected results. Instead, let's state a negative delineation as follows:

We no longer want learners to experience an education that primarily focuses on rapid recall and mere reproduction of facts.

Following Levermann's idea borrowed from the principle of physics, the way that this may be achieved should be left as open as possible to allow for innovation.

The innovation that Levermann indicates is not the kind touted by the forces of neoliberal school improvement. Pedagogical innovation that deserves its name does not force chronically overworked and underpaid teachers to hectically implement yet another short-lived scheme of work, curriculum revision, or pedagogical fad that was dreamt up in a boardroom.

Innovation means trusting teachers and their professional expertise. True innovation is rooted in educators' understandings of how best to support our learners in their given contexts. It leaves space for approaches that hold meaning and are motivating without resorting to the help of superficial reward systems that work as capitalism in a nutshell ('How many rewards is my behaviour worth? How can I increase my profit?').

What Could Such innovation Look Like?

Inviting a wide selection of educators and members of civil society to the table to reverse-engineer education by starting with what we wish to *avoid* may clarify our focus and simplify the process. Jay McTighe has recently updated the original approach of understanding by design with a volume that takes account of linguistic diversity and inclusive classrooms (Heineke and McTighe 2018). Such a wide-angle lens is needed for an open discussion about the kind of education that is clear on what it *rejects* yet is open to various permutations of what it *may aspire to*.

Simultaneously, we could advance the existing critical discussion about the evident limits of measuring 'good practice'. How can we truly aspire to quantify and statistically compare the benefits of a globally diverse educational practice that is locally rooted and responsive to specific learner contexts? Rather than obsessing about league table ratings, we may learn to recognise, value, and celebrate approaches everywhere – not with the impetus of producing the next handy list of 20 best educational hacks, but in true appreciation of the fact that meaningful education is anchored in time and place.

And while we are at it, why not rethink the concept of school itself? The origins of schools and schooling lie in an organisational necessity of industrial times. For all the proclaimed innovation that has taken place, the core idea has changed remarkably little: We foster knowledge in the confines of a building - or outdoors, following the growing body of outdoor education initiatives. Many of us still buy into the traditional concept of providing examples which students should follow. Naturally, we as educators do well adhering to this model in a world that rewards those of us

whose students score highest. Yet teachers caught in traditional conceptions of school, schooling, and their own role within this system are rendered powerless. Educators whose agency is put in a neoliberal straitjacket literally don't have their hands free to foster the growth of the innovators and problem-solvers that we so badly need.

The reason that we are persistently unable to conceptualize education as radically different from its current status quo is not so much that we educators enjoy glancing permanently at our own feet. Rather, there are powerful forces that attract our downward gaze and that rightly fear the moment that education emancipates itself from being a self-reproducing system of neoliberal values. An enforced obsession with outcomes, quality standards, and the next ranking of basic skills mastery has us fearfully scanning the ground at our feet, aware of the fraught and disenfranchised state of education globally yet rendered unable to lift our gaze to take in the full picture.

Using Levermann's suggestion as an impetus, I would like to suggest calling on our profession to determinedly erase the lines in the sand that have kept our gaze fixated

downward for too long. Let us add urgency to our rethinking by loudly voicing the ugly truth we all know: education as it currently stands will not save us. Education as it currently stands reproduces what we already know, rewards privilege, and is undemocratic.

Let us boldly define what kind of education we no longer want. Let us identify clearly whose agenda is served by teaching to the test, the league table, and the outcome ranking. Let us trust in the ingenuity and creativity of a world community of educators and civil society that can find many paths to success whilst avoiding the one thing: an education we no longer want, nor have any need for.

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