



# Think Piece

## What Education is of Most Worth in a World Where We are Consuming the Future of our Children?

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### *Abstract*

*This paper argues that we have to radically rethink the purposes of education in a world that is becoming increasingly unequal as global warming intensifies. It argues that our current generation is taking away worthwhile choices and opportunities from our children by handing them a world that will be more unequal (Picketty, 2013) and hotter (Morris, 2010) than it is now. The author used to hold a position that powerful knowledge was a good overarching response to the issues of inequality in education as it enabled learners from poor backgrounds to escape poverty through knowledge. With global increases in warming and inequality, education needs a far more radical response to these issues. This paper constructs an historical argument that shows why powerful knowledge was such a worthwhile outcome of education by reconstructing Spencer's answer to the question 'what knowledge is of most worth?' (1884). He argued that systematic knowledge was of the most worth and this answer has found strong and well-articulated current support in the work of Michael Young and Joe Muller (2013). This answer makes sense in a world that has a high demand for skills and rewards them with decent occupations and remuneration. However, in a world of increasing inequality and deskilling of jobs, powerful knowledge loses some of its power. Furthermore, with the current inability of humanity to control its acceleration towards heat death, education has to take on a far more radicalising function than that which powerful knowledge can provide. This paper does not suggest what ways we can find out of our current tragic mess, and prefers to prolong the moment of despair; although, it does suggest that processes underway and supported by environmental organisations indicate some ways forward.*

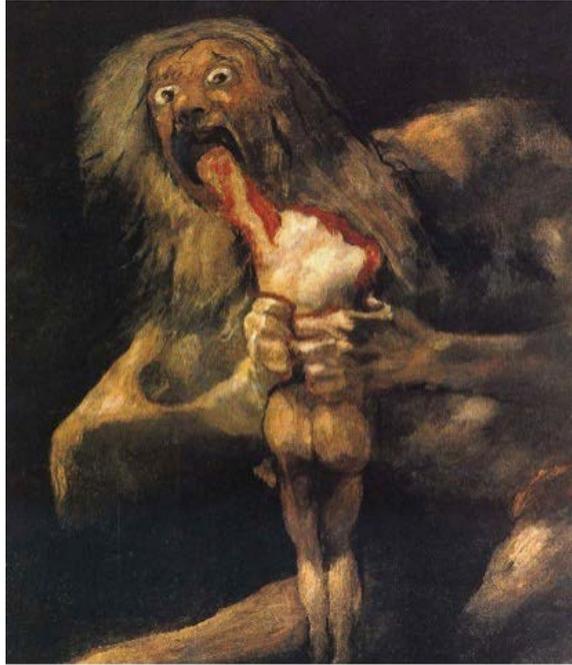
### *Introduction*

A painting metaphor captures in two images what the paper argues our current generation is doing to its children. The two terrifying paintings by Goya and Rubens are of an old man consuming his children, taking away their future before they can live it. The central argument of the paper is that our current generation is taking away the life chances of our children's children through ways of living that are resulting in heat death and increased inequality. In such a world, we need to radically rethink some of our answers to the perennial question each generation has to answer – 'what knowledge is of most worth?'

Between 1820 and 1824, Goya, old and infirm, painted 14 private paintings on the interior walls of his villa. The dining room, fittingly, had a painting of Kronus eating one of his children.

When Goya initially bought the villa, he had started with more idyllic scenes, but these were blacked out and replaced by the 'black paintings'. The earlier painting, behind the mad Kronus, was of a dancing figure, but this was macabrely transformed into cannibalistic incest.

**Image 1.** Goya: *Kronus Devouring His Son* (1823)



We have no insight into what drove Goya's darkening heart but this most private of expressions has survived to become one of his most iconic paintings. It was not meant to survive; no protective layers were added, and it had to be carefully pried off the walls and bonded on canvas for posterity's sake.

The Greek myth of Kronus is about a titan who hears a prophecy that he will be overthrown by one of his children, just as he had overthrown his own father (Uranus) by castrating and imprisoning him. To ensure this does not happen, he devours his children as they are born. However, it is not a new-born infant that Goya depicts, rather a young adult, and it is hard to determine the sex of the already dead body, making it a universal symbol of youth destroyed by an older, madder generation.

There are variations and degrees of madness and insanity. If we compare Goya's Kronus to Rubens' Kronus, painted almost two hundred years earlier, we can get a symbolic comparison of the grades of madness.

**Image 2.** Rubens: *Kronus Devouring His Son* (1637)



Rubens's Kronos is still in control of his 'wits'. He is a recognisably wise old man gone mad, with the staff and stars still guiding his way. Rubens's own account in a letter to Franciscus Junis is that he followed

all the examples, the opinions and the tenets promoting the dignity and splendor of the Art of Painting which the ancients enshrined in their literature and which have, to our very great benefit, survived to our day. (Harrison, Wood & Gaiger, 2000:28)

We can see the beautiful and innocent child, still alive, arched towards us, unwittingly experiencing the first horrors of a wise older man beginning to consume him or her. As with Goya, we cannot tell the sex of the child, making him/her a symbol of infancy consumed by an elder generation.

I suggest that we are currently caught between these two images of what the older generation is doing to its young. We are beyond using images of protection, love and care, caught by Morisot's late 19th century painting of a mother peacefully contemplating her beautiful daughter, who is safely ensconced in a cradle.

**Image 3.** Morisot: *The Cradle* (1872)



As a species, we are not protecting our future progeny, we are consuming them. Morisot's tranquil meditation holds no traction for us in the 21st century; we are not at the cradle with our children, we are between the early reasoned madness of Ruben's Kronus and the crazed insanity of Goya's Kronus. It is in this space that we have to ask 'what education is of the most worth?', repeating the question asked by each generation anew, but this time asking it in radically different times.

We are in dark times. The tales of linear and cumulative growth in reason and wealth that we have comfortingly told ourselves since the late 18th century secular 'enlightenment' struggle to hold as we hurtle upwards towards an apocalyptic cliff – or at least that is what we want to believe, that we are still hurtling *towards* the cliff, not already *plunging off*. We want to believe that we still have a moment of choice where normal time stops and we have an opening to choose between two paths, one of which is us protecting our young, the other us destroying the future of our young. I don't think that is our choice anymore, we don't have that choice, all we have is the space between Ruben's and Goya's Kronus. It is from despair and not hope that we have to rethink what education is of most worth.

## *Kronus, Chronos and Kairos*

The ancient Greeks had a term for such a time of opportune choice; where normal chronological time stands still – a moment of open possibility that must be taken or lost. They called it *Kairos*, and juxtaposed it to normal time *Chronos*. For the ancient Greek rhetoricians, *Kairos* was the moment in which a proof was delivered, the moment that brought all the elements of an argument together into a decisive judgement that carried the day. Christians picked up on the term and turned it into an existential decision that must be made by an individual in a time of crisis. So we have the titan Kronus, consuming his children, mixed up with Chronos, the Greek god of chronological time, and both mixed in with *Kairos*, the supreme moment that must be taken or it is lost. We are in lost times. The moment of *Kairos* has passed, our actions do not allow for a moment to arise where we can decide to protect our young, we have already consumed that moment. We are not in a world of ‘post’ this or ‘neo’ that, we are in a lost world. In this world where we consume the future of our children, what sense can we make of the venerable education question – what knowledge is of most worth? It is an educational question each generation has had to struggle with, but never in the current conditions we have made for ourselves.

To get a handle on how the question has been answered in the past, let’s step back for a moment and explore how Herbert Spencer answered this question a hundred years ago when forward and upward progress was a foundational assumption in dominant western societies. Please note that there are many answers given historically to this question. Rousseau, in *Emile* answered it with a civic call; Dewey, in *Democracy and Education* answered it with ‘democracy’; Ken Robinson has recently answered the question with ‘creativity’; and Nell Noddings with ‘care’. In this paper, however, I would like to focus on one specific answer that has been historically strong since Plato’s *Republic* – ‘powerful knowledge’ – and use one of the most profound thinkers of the 19th century to elaborate on it.

### *Herbert Spencer’s Answer to the Question ‘What Knowledge is of Most Worth?’*

Herbert Spencer was one of the most influential British intellectuals of the 19th century across a number of fields, one being education. In *What knowledge is of most worth*, he outlined the regulative principles of education he reasoned were the most important. Spencer starts with an attack on ‘the education of a gentleman’ where Latin and Greek is learnt to no practical purpose. He imagines a boy, now grown up, living in a practical adult world, finding his classical education of almost no worth whatsoever:

in his shop, or his office, in managing his estate or his family, in playing his part as director of a bank or railway, he is very little aided by this knowledge he took so many years to acquire ... If we enquire what is the real motive for giving boys a classical education, we find it to be simply conformity to public opinion. (Spencer, 1884:3)

The battle lines are clear. Spencer is not looking for an alliance with traditional forms of education that bring honour and respect, he is out to destroy the old and bring in the new – the question is: what new?

His next move is to ask what principle we can use to determine ‘in some rational way what things are really most worth learning’ (1884:9). Spencer suggests that we must find a way of putting the principle in as general a way as possible so that it speaks to all of us. He finds such a regulative principle for education in its function to ‘prepare us for complete living’ (1884:12). As human beings, this is something we all want. It is common to all of us.

But this principle is not enough, it is too general, too vague. What is needed is an ordering of worth from most important to least important (Boltanski & Thevenot, 2006). Spencer provides just such a list:

- Firstly, we need to preserve ourselves, for nothing else is possible (from an anthropocentric perspective) without this base;
- Secondly, we need to secure our means of living through work;
- Thirdly, after securing our own survival and sustaining it through work, we can look towards the survival of our family;
- Fourthly, once our family is secured we can expand outwards to the preservation of the state; and
- Fifthly, only once all of this is secured can we look forward to some leisure activities.

Because of a scarcity of resources and time, it is impossible to do all of these activities all the time in education, so we need to allocate an order of worth, where the most important activities get most of the time and the least important activities least of the time (Boltanski & Thevenot, 2006:17).

But how do we decide what is important within each of these areas, after we have ordered their worth? Spencer argues that all five of the above activities work best with science:

For direct self preservation, or the maintenance of life and health, the all important knowledge is – Science. For the indirect self preservation which we call gaining a livelihood, the knowledge of greatest value is – Science. For the interpretation of national life, past and present, without which the citizen cannot regulate his conduct, the indispensable key is – Science. Alike for the most perfect production and highest enjoyment of art in all its forms, the needful preparation is still – Science. (Spencer, 1884:84-85)

Spencer has found the most general regulative education principle that speaks to everyone everywhere and ensures a better life for everyone – a common good – and it is ‘powerful knowledge’, or science located within a free market that allows everyone to compete.

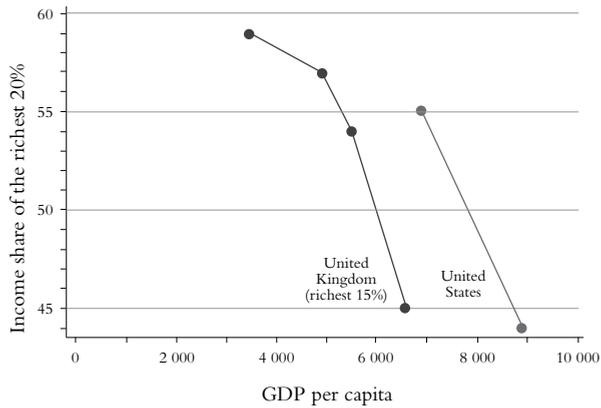
Necessary and eternal are its truths, all Science concerns all mankind for all time. Equally at present, and in remotest future, must it be of incalculable importance for the regulation of their conduct. (Spencer, 1884:85-86)

*What knowledge is of most worth* deservedly exists as one of the classics in theorising education and I have not done it justice with this truncated account. Paramount throughout is the principle of *specialisation through science*; whether it be physical science, social science, domestic science, political science, or human science. It is this principle of specialisation through powerful knowledge, Spencer argued, that provides us with the common good all of us need, but have to work very hard to attain. It is this principle that we can use when choosing what should go into the curriculum and what should not; it is this principle that regulates what and how we do education; it is this principle that tells us what knowledge is of most worth. The principle of powerful, systematic, ordered knowledge, placed within a bigger socio-economic world of the free market and competition, Spencer felt, would improve efficiencies and drive progress ever upwards. This is how ‘the survival of the fittest’ worked – a phrase Spencer used to describe Darwin’s Natural Selection and then extrapolated to social and economic forces (Paul, 1988). An education that was scientifically based enabled the survival of the fittest.

This argument made sense in a late 19th century Anglo-American dominated, liberal-capitalist world with exploding economies, increased energy capture, massive innovation and a growing population. However, the negative reality of capitalist growth was always clear to see in that century – it might increase productivity, but it also increased inequality, as Marx pointed out. What was the point of improved productivity if it mostly went to the rich and immiserated the poor? Capitalism had to be radically critiqued and opposed with profoundly alternative models. Science was not enough as a regulating principle of education, there had to be a more radical regulating principle that fundamentally changed the inequalities produced by capitalism. Spencer’s answer to the perennial question ‘what knowledge is of most worth?’ struggled in the face of child labour, tenement squalor and obscene wealth for the few. Radical educators with a strong social justice orientation could not accept a principle of science that ignored the rapid increase in inequality and suffering, and began to push for a strong critique of how science and capitalism worked hand in hand to strip the poor and – as we increasingly began to realise – strip the earth. Then something strange happened to the increasing levels of inequality generated by capitalism in the 19th century: instead of continuing to increase to the point where the only choice would be revolution, as Marx predicted, inequality levels within the more developed capitalist countries started to lessen in the 20th century.

### *The Kuznets Curve and the Decrease of Inequality with Capitalism*

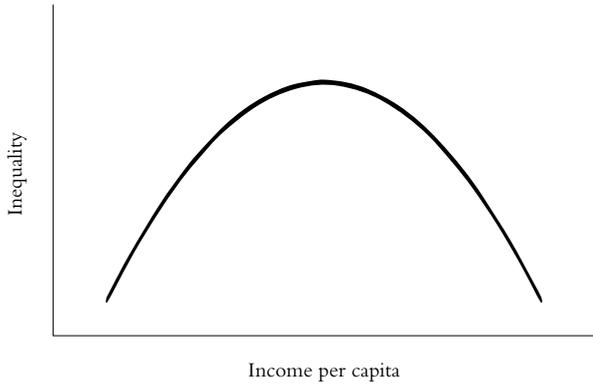
This trend was clearly articulated half way through the 20th century. In 1954, after compiling what was then one of the largest data sets on income inequality, Kuznets gave a presidential address to the American Economic Association on historical trends within income inequality, subsequently published in the *American Economic Review* (1955). The data he had collected, which was most extensive for the United Kingdom and the United States, took the following pattern for the time period 1913–1948, which can be simply caught in the following graph:

**Figure 1.** Inequality data from Kuznets showing decrease in inequality (1913-1948)

The income share of the richest 20% in both the USA and UK had fallen dramatically as the gross domestic product (GDP) per capita went up. Income inequality between the rich and the poor diminished the more the growth of the economy increased. It was an astonishing finding. As GDP per capita went up, the percentage share of the richest 20% went down. Economic growth (mainly in the West) actually resulted in less economic inequality in those countries. Income growth was rising, but was being increasingly distributed away from the rich and towards the poor using democratic and welfarist policy measures. It was a fairytale ending for the capitalist system in these bounded spaces. This system, with all its selfish profit motives, resulted in a benign distribution, where everyone in these bounded spaces started to benefit, not just the rich. There really seemed to be a hidden hand in capitalism that seemingly took wealth from the rich and trickled it downwards, as Adam Smith had predicted.

Kuznets' conclusion was that industrial development in its early phases had logics that increased income disparity between the rich and the poor; but, at a certain point, the trend reversed itself as the economic system matured, resulting in decreasing levels of income inequality. Marx was right about early capitalist industrialisation increasing inequality, but wrong about the long-term trend in these bounded societal contexts (as income inequality continued at a global scale). This gave an inverted U shape to income inequality within capitalist forms of industrialisation in the West. Please see Picketty's introduction in *Capital in the 21st century* (2014) for a fuller description of what I am simply summarising here.

In a world where burgeoning science and capitalism together actively reduced inequality, it was hard to hold onto a radical critique mindset. Spencer's answer to the question of 'what knowledge is of most worth?' in the societies that were benefitting from this logic – science, science and more science – made sense, as it actively improved production, reduced inequality and increased life chances in these settings.

**Figure 2.** The Kuznets Curve

In such a context (that of decreasing inequality and growing production), a child from a poor family who gets a sound education based on powerful knowledge has real prospects of improving his/her lot. The economy needs their specialised skills and is prepared to pay for them. Education acts as a force of convergence, reducing levels of inequality by providing specialised skills that are in demand, no matter if you are rich or poor. In such a context, Spencer's answer of 'science' makes sense. In Kuznets' world of decreasing inequality within a growth of output, education plays an obvious and powerful role as one of the forces enabling at least some convergence between rich and poor, because its effects are clear to see. But Kuznets was writing in a very particular time: the 1950s in Anglo-American environments, with their peculiar need for massive reconstruction after the world wars, which also created considerable growth opportunities as USA expansionism extended to the East (e.g. Japan) in post-war rebuilding efforts. So much had been destroyed, so much needed to be rebuilt, creating a 'new world' of solidarity where all could come together and benefit.

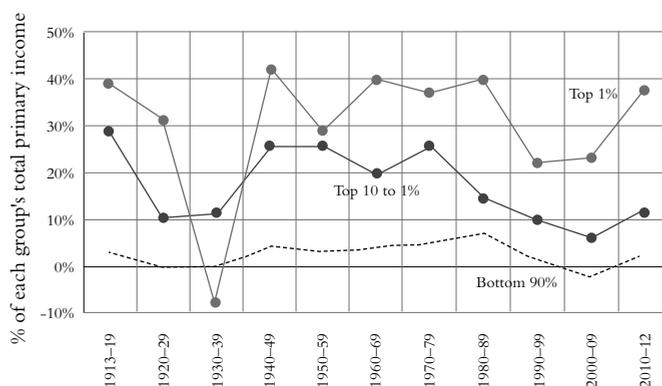
Combine this need for reconstruction in the 1950s with the explosive global growth in production and population, as well as massive improvements in technology, and it becomes clear that if you had a high-level skill then you would be in demand and an education that gave you that skill would also be in demand. Skills are quickly snapped up and rewarded with increased income in a world that is growing economically. Ostensibly, everybody did benefit, and education as a provider of powerful knowledge was therefore seen to be key to increasing income for the poor and lowering the income gap between high earners and low earners. It is deeply ironic that this great take-off in economic productivity is now being used as the possible starting date for the Anthropocene – the period where human activity becomes the dominant influence on climate and the environment.

### *Inequality in Wealth – Saez, Zucman and Picketty*

Kuznets did not have the means or the time to gather data on wealth inequality – on the amount of capital people own *as well as* how much they earn. The very rich mostly do not earn direct incomes from work done, they receive dividends and rents that enable a life of leisure. Measuring income inequality, as Kuznets did, missed the massive wealth the very few own and pass down as dynastic inheritance to their children. The amount of wealth in the world is far more than how much people earn in a given year, and wealth acquisition and growth has much less to do with education. A good education might and should get you a better income, but it does not get you wealthy – that you get from your family and its networks, or if you are one of the exceptional few who ‘make it big’.

The simple reason for this is that there is an initial cost to simply reproducing your everyday existence before saving and investment becomes possible. The richer you are, the more you can save and invest. The poorer you are, the more your money goes on food and transport and survival, with nothing left at the end of the month. Middle-income earners can begin to invest and save, but the proportion of their income available for this is limited and takes longer to build up. For the bottom 90%, wealth does not even feature as a possibility, as it is life that is being reproduced, not wealth. For the top 1%, they are able to save and invest around half of their earnings, even with a lavish lifestyle, and pass this lifestyle down to their children, regardless of their education levels (Saez & Zucman, 2014).

**Figure 3.** Saving rates by wealth class (1913–2012)



The rich save more as a fraction of their income, except in the 1930s when there was a large dissaving through corporations. NB: The average private saving has been 9.8% over 1913–2013.

If education is one of the major forces of convergence that reduces inequality, then wealth is a major divergent force, as it tends to accumulate in the hands of those who already have it, and stay there. If there is a high rate of return on capital, then the rich get richer and do so in ways that are far out of reach for those earning incomes. Recent studies on the rate of return on capital investment (most famously articulated by Picketty’s *Capital*) show that, historically, wealth (or capital) returned 4–5% per year on average.

The rich lived off their investments, and always have done. Education for the rich was about networks, connections and the social dispositions to maintain them; not learning skills or specialising – those are working class and middle class preoccupations that revolve around wage income, not enjoying and protecting capital investments. Spencer's argument for science and competition was strongly convincing for the emerging middle class, but for the wealthy and the social networks they lived in, it was far more important to seem a gentleman or a lady. Two world wars substantially changed this picture, however, with massive amounts of concrete wealth destroyed by bombs and a great depression radically devaluing wealth. The rate of return on capital dropped, and actually fell below the rate of growth of the economy.

In a world of increasing economic growth and decreasing return on capital investments, the role of education as a converging force towards equality was exceptionally enhanced. What you could do became more important than what you had invested, and what you could do was directly related to how good your education was, and specifically what powerful knowledge and skills you had. Then, even better, as the developed world recovered from its great self-destruction, so too did the return on capital slowly improve; this meant that not only did you have a chance to make money, but the returns on your savings began to increase. Spencer's answer to 'what knowledge is of most worth?' strongly resonated in such conditions.

This set of factors, where the annual growth rate of global output was greater than the rate of return on capital, has consistently held through most of the 20th century; from World War I to the early 1970s, according to Saez and Zucman (2014). In this world, powerful knowledge is in high demand, and anyone who has it is venerated and rewarded, enabling a break in the cycles of poverty (where the struggle to reproduce life is overwhelming), towards a world where you start to focus on growing your capital or wealth and benefit from its increasing returns. So, not only are your knowledge and skills in high demand because of the increasing growth rate stimulating demand, but the reward for investing your savings is also increasing, resulting in a double-bonus reward for investing in powerful knowledge. If you want the capitalist version: investment in human capital made sense and offered strong returns; if you want the social-realist version: investment in powerful knowledge made sense and offered improved life chances. If education offered such high returns for most of the 20th century, then why the dystopian beginning to this article?

This long 20th century trend of high growth combined with high returns on investment was not how things had always been, and nor, according to Picketty (2014), is it going to continue (and he can say so, based on a massive data collection on inequality that Kuznets could barely dream of). His findings show that, since the 1970s, divergent forces that seek to widen the inequality gap have taken over, resulting in a macro-economic picture in which the growth rate of global output is again decreasing to levels last seen before the 20th century; while, at the same time, returns on wealth investments are increasing towards the historical average of 4–5%. Basically, this means that the rich will reap rewards from their investments, but not leave any openings for others to get in on the wealth pile, due to low levels of growth. These potent divergent forces that increase inequality have a dramatic impact on the effectiveness of powerful knowledge as a force for convergence.

In a world where the rich are super rich and almost everyone else is relatively poor, the worth of *powerful knowledge* lessens in relation to the *knowledge of the powerful* – the connections of the powerful, the networks of the powerful, the families and friends of the powerful. The loss of power in powerful knowledge is aggravated by continuous ‘improvements in technology’ that are automating high-level skills through computer programmes, reducing the demand for the high professions (engineering, medicine, accounting, architecture and law) and middle level professions (like teaching). Programmes design houses, build bridges, calculate taxes, spurt out diagnoses, teach lessons, assess lessons, give feedback to lessons. Lawyers, doctors, engineers, architects, accountants, teachers are looking for work, threatened by outsourcing and technological replacements; never mind drivers of trucks and taxis, housekeepers and sex workers. It is not that powerful knowledge is not still important, or that, for some, it offers a chance to escape the cycle of poverty through its powers, as Young and Muller (2013) cogently argue, but the conditions that used to give it so much purchase in the past have changed. It is still a force for convergence, but in a world where forces of divergence are rampant.

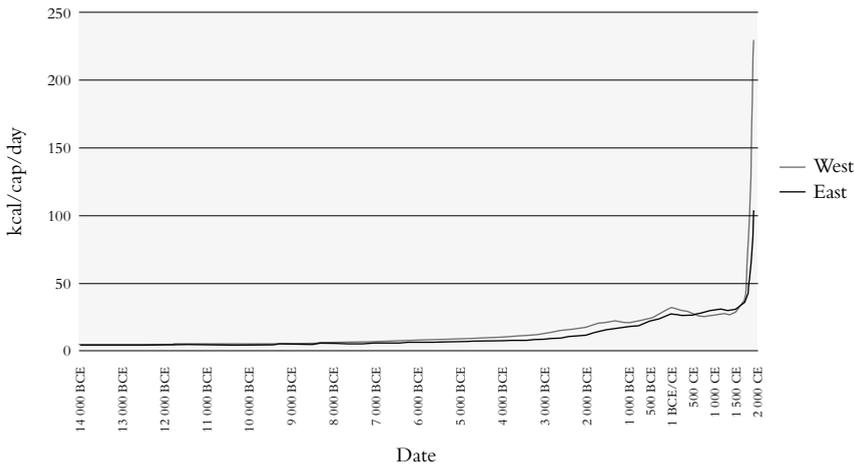
With an increasing divide in wealth and a slowing of the growth rate, channels that offer advancement in the world are taken up and dominated by the wealthy and their networks. The best schools, the best universities, the best holiday programmes, the best tutors, the best extra-curricula activities, continuously invested in from birth to death, mean that the few opportunities that there are, are taken by the ‘best’, and the best is bought. To give poor, working class students the hope that powerful knowledge will get them out of their increasing poverty, is to sell an out-dated 20th century dream. To become a professional is a continuous two-decade investment that involves energy, commitment, community support, family pedagogy, networks and money. To fail at the task leaves you in an indebted world, divorced from your local and located networks. For in a world of increasing wealth gaps and low growth, it is the community you have grown up in that is the safest place to learn in, become a part of and to fight for. It is in the local community that you can find a space to struggle for something new; that is if your community has not been broken down, gentrified, isolated, or subjected to the ravages of pollution and degradation, or demonised.

Nor is there any way we can wish for a return to high growth rate in global output, for that comes with massive consumption of energy, spewing out entropically, increasing the pace of the heat death we are already on the path towards (IPCC, 2014), overwhelming any attempt of our current human systems to cope with it. Any discussion about the increasing inequality within the world and the role education can play in addressing it has to deal with the far bigger issue of our current energy consumption being far larger than an environment conducive to humanity can absorb. It was science that enabled us to capture and use the energy resources of the world built up over millions of years, the science Spencer speaks about so glowingly as ensuring our survival and improving our lives; this science is now a monster god, burning us in its glory. We tell ourselves that this same science will save us, give us the moment of Kairos, where we can make a decision that saves us all; whereas we are all already in hell, except we don’t know it yet. And like Dante found, when walking through the circles of the inferno, all he met there still desired their suffering, continued to inflict it on themselves, repeated the same actions, even though it brought pain and pushed them deeper into their own misery.

## The Anthropocene and Education

To see this clearly, we need to place Picketty's insight that wealth is again concentrating in the hands of the few to the cost of everyone else with a telling graph constructed by Ian Morris (2010) that shows the sudden and exponential increase in energy capture over the last 300 years in both the East and the West. Increased energy capture allows for massive expansion of population and social development at the same time, as the core needs of energy are provided. It should be a victorious tale of how human ingenuity and scientific innovation have culminated in the most flourishing time for our human species. However, we know what this energy capture has actually resulted in – the threat to the future of the human species on earth, even though we recognise the consequences and are doing it to ourselves.

**Figure 4.** Eastern and Western energy capture (14 000 BCE to 2000 CE)



It is in the context of our ability to capture and exploit energy that the human species has become a force to actually change the way the whole physical world functions. It is vital to make a distinction between the Holocene and the Anthropocene at this point (Williams *et al.*, 2016). The Holocene is a geological term for the recent warming period on earth starting around 9700 BCE. This period also coincides with the increasing impact of human kind on earth as its population grew and became urbanised. However, from the industrial revolution in the late 18th century, there has been an ever-increasing explosion of human impact on earth. Since 1964 (my own birthdate), human impact has become even more pronounced, with global rates of extinction, carbon dioxide emissions and rapidly increasing erosion. The old man in the two paintings is also me. But, navel gazing aside, this paper can be simply put as a statement: with the Anthropocene comes a whole new set of radical questions about what education is of most worth. It is not like we, taken as the human species, have used all this energy to ensure increasing equality for all; instead, it is being used to exploit and increase inequality. How can

it be that we are currently in a world that is destroying itself due to massive and polluting consumption of energy, at the same time as ensuring that only the few accumulate all the resources from this consumption?

There are people currently struggling to answer the question ‘what knowledge is of most worth in the age of the Anthropocene?’ Some, like Ray Kurzweil (2005), push for exponential technological innovation. Others, like Theresa Lloro-Bidart (2016), push for eco-feminist and post humanist political ecology education. This article is torn between discussing what these answers currently are and leaving a genuine space for despair without answers, at least for a while. I would like to stay with the second option, stay caught between growing inequality and heat death. I think we sometimes move too quickly towards answers in the hope of some kind of emotional normalisation in a human world directly focused on self-harm. I would like to remain with the question for a while, but do undertake to attempt my own best answer (along with an account of other answers) in a future issue of the journal.

### *Conclusion*

It becomes clear that our current generation has to answer the question ‘what knowledge is of most worth?’ in a new, far more radical way than Marx could have imagined; for it is the future of humanity at stake, not just the proletariat, and we are consuming the very possibility of responding to this crisis in the future. The old venerable answer that seemed so new and fresh with Spencer, that attacked and critiqued the even older classical education of the gentleman with a clarion call for progress through powerful knowledge, is now out of date for three main reasons:

- Firstly, it has consumed our future through an omnivorous present that uses every single specialised means it has at its disposal to exploit and capture our world to the point of our own species destruction;
- Secondly, it now exists in a world where the wealthy dominate and the value of powerful knowledge has lost its potency in the widening chasm of inequality; and
- Thirdly, high technology is now devaluing professions with sophisticated algorithms that can do most of the legwork, resulting in many professionals suddenly finding themselves relegated to data entry and a human touch.

We need a new answer, and the space we look for that answer is partly with the people engaged in environmental education, like Professor Heila Lotz-Sisitka and the community surrounding her, and with journals like the *Southern African Journal of Environmental Education* and *Environment and Society*. This does not give me much hope for our future, but it does mean that when the children of our children face the catastrophe we have already created for them, they may at least look back on some of us with something a little milder than hatred and disgust.

### *Note on the Contributor*

Professor Wayne Hugo is an associate professor at the University of Kwa-Zulu Natal's School of Education and Development. He is researching and writing about how we can use education as a force for good in modern times. Email: hugow@ukzn.ac.za

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