Editorial

Wayne Hugo

Sometimes, when doing an Editor's work, you come across a review that gets to the nub of a paper in a succinct and telling way. Here is one such example, commenting on Zain Davis' esoteric work:

> This article provides a goad to thought for the education community. What I gather it is in the end 'about' is the radical incomplete-ability of knowledge, but the intricate argument is couched in a typical seeming-contradiction, which it is the article's mission to show is not a contradiction at all but a necessary conclusion. The seeming-contradiction is this: it is only by means of a theory, which aims to include everything (a 'totalising' theory), that the incompleteness of knowledge can be systematically revealed.

A partial theory that only aims at a slice of life struggles for relevance, because life is complicated and a slice is often cut off from surrounding factors. But the more surrounding factors included in a theory, the less range it has to generalise, because the surrounding factors are contextual and localised, and tie the theory up to its local context. The art of theory is to provide more and more factors that are less local and more conceptual – that keep the generalising range of the theory whilst at the same time increasing its density of factors. Take education theory as an example. We love using generalising concepts like 'power', 'discourse', 'hegemony', 'subject', and so on. This can be a lazy use of theorising, because it is not holding the two key acts of theorising at the same time – extending the range of generalisation and the density of conceptual relation. It is easy to use one generalising concept and show how it applies to education, but this ignores that vast complexity of both context and concept. We have a paucity of abstract theoretical models that show how different factors formally relate to each other. It is also very easy to point out how incomplete the theory is by simply giving your alternative standpoint or theory. This is a weak and unsatisfactory use of incompleteness. Contrast this type of incompleteness to the limit point hit in theory as one reaches and struggles for abstract density of relations and finds within it the incomplete-ability of knowledge. Here is a far more honest and onerous struggle that finds within its own attempt at completeness a radical threshold. Fresh from this internal struggle, the theory then has to show how it relates back to the world it was abstracted from, and here again it hits radical incompleteness, for the profuse richness of the world pours over the analytical distinctions and models, disrupting and warping them. So it is the ambitious

theoretical project that really gets to grips with what incompleteness means, not by being attacked from others outside who simply posit their position, but by the struggle within its own frontier. Both the struggle of conceptually developing a complete internal theoretical language and showing how that dense language relates back to the external world hit radical limits – the first because it starts to generate internal logics that go in contradictory directions; the second because the attempt to externalise the theoretical abstractions hits the full-blooded nature of reality that interrupt and deform its external reaching out. And it is this kind of incompleteness we can be proud of as academics, because its radical disruptiveness forces theoretical and empirical innovation that push us forward rather than entrench us into standpoint positions that shout at each other from across an ill-conceived boundary that is really only a narcissistic mirror.

So, please struggle with Zain Davis' paper, even if you don't understand it the first time (like what happened to me), and even if you have to spend time researching what Kant had to say about antinomies, or Bernstein about the discursive gap. The paper is as elegant and clear as it possibly could be, given its content and argument.

Carol Bertram understands the kind of theoretical struggle Zain Davis articulates, for she is discontent with over simplified theories that have no real grasp on reality. Her own grappling with what a more complete theory can be has resulted in adding more and more specific concepts and key factors into her theoretical toolbox to extend the range and subtlety of analysis. But as the key factors increase, the task of holding them together in a theoretical model that shows how they interrelate becomes exponentially more difficult. Bertram's own reaching towards theoretical sufficiency results in her hitting the incomplete-ability of knowledge. Combine this analytical struggle with the ambitious scope of her subject – secondary school curriculum documents from South Africa, Canada (British Columbia), Singapore and Kenya – and we have a fascinating paper that takes us on a trip through how four very different countries structure their history curriculum. Her initial key factors are time and space – how the countries' curricula work with chronology on the one hand and with local, continental and global histories on the other. All four countries work with chronological time systematically, moving forward from old to new. The first and clearest difference that jumps out is how Kenya orders its history curriculum on a national space grid whilst all the other countries use more international ordering principles that go beyond a focus on

domestic history. But History also gets more complex as it progresses through the grades, both in terms of historical concepts and procedures. All of a sudden, the paper is trying to hold together shifts in space, time, concept and procedure. How do these four factors relate to each other? The complexity of theorisation explodes. Add to this how the paper is working with Bernstein's theory of the pedagogic device – specifically how esoteric history knowledge is recontextualised into curriculum knowledge. All of this is happening in one of the most potent subjects for consciousness formation, resulting in massive political influences on how History is done at school. And Carol Bertram is holding all of this together whilst at the same time having to negotiate how she uses the theoretical frame to develop an external language of description that fastens the four factors onto the empirical object of History curricula in four countries. Doing academic work like this is hard, especially if you want it also to be readable and interesting. It is a struggle. Moves are not obvious, and what seems like a simple statement after the theoretical yards have been made has actually taken intellectual sweat and tears.

There are theorists who infuriatingly make the job look easy. Zizek has been able to take the work of Lacan and Hegel and show how it helps analyse current culture, politics, and society. Anne Becker and Petro du Preez use Zizek to illuminate the use and abuse of human rights within education discourses. Continuous claims are made that all learners in South Africa have equal access to education, and even though we know this not to be true, and we know the claim actively damages those without access, we still don't actively renounce the claims when made. The illusions of democracy and human rights continuously lie about the lack of access and the non-existence of human rights. Anne Becker and Petro du Preez hope that faculties of education take up this struggle, break the illusions neo-liberalism holds us under, and develop a more activist human rights literacy that refuses glib assertions for a more tangible struggle towards genuine human rights that engages with poverty, gender, religion and social justice.

Social activism has to come with an internalised ability to self-direct learning. To be active outside one has to be active inside. To take initiative and critique facile human rights discourses, one has to take initiative with oneself; to engage with others on how a fuller version of human rights works, one has to engage with disciplines of the self. There are real dangers with social activism becoming an un-critique-able mantra that individuals have to follow or suffer sanction. The tangible absence of self-directed learning with many of our

teachers and learners is a key problem afflicting South African education, and this is why we have published the interesting paper by Elsa Mentz and Sukie van Zyl. How can it be that many of our teachers teach a subject for years but can do little more than barely scrape through tests of their subject knowledge? Why have they not taken control of their own learning in the process of teaching others, especially when what they are teaching is what they also need to understand? Self-directed learning is a gift that keeps giving, a skill that multiplies other skills, an attitude that magnifies learning capacity, and a navigation device that enables flexibility of movement and decision making at the micro level. In our current CAPS dispensation with its demand for strong control over the selection, sequencing, pacing and assessment of knowledge there is a real danger that we equate strong control with the endangerment and/or collapse of self-directed learning. If teachers and learners are being told what to do on a daily basis, how are they supposed to develop self-directed learning skills? It's a false opposition based on a failure to understand how developing educational systems and internal learning processes work.

Why?

Both a developing educational system and mind need a simplified space in which to start to learn and practice the complex skill of self-direction. By restricting and clarifying options a reduction in the complexity space results in an increased ability to focus on the matter at hand, increasing both retention and an ability to make decisions. The danger does not lie in the strong framing of selection, sequencing, pacing and assessment of knowledge, the danger lies in the refusal to use strong framing as an opportunity to SIMPLIFY and instead proliferate explicit instructions and content to the point where collapse is inevitable.

Nor should cooperative learning be seen as contradictory to the need to simplify. One can proliferate and over complicate both a strongly framed and weakly framed pedagogic situation; and one can simplify both a strongly framed and weakly framed pedagogic situation. Do not confuse strong or weak control with simplification. What we need in South Africa is a simplified educational space; for it is here that self-directed learning has the breathing room to find its rhythm.

Allow me to elaborate on the argument, using Patti Silbert and Clare Verbeek's paper on collaborative support for student and mentor teachers during teaching practice. They found that it helped to distribute the mentoring

function rather than keep it tied to a one on one relationship between student teacher and mentor. The reasons for this have to do with the strong possibility that either/and/and the mentor, the student teacher, the school, or the university have dysfunctional elements, resulting in catastrophic failure in the teaching practice. In this developing context there has to be distribution of function to ensure robustness of the system. The danger does not lie in distribution of function; the danger lies in making the distribution too complex and in love with its own elaborations. Simple and distributed are not contradictory terms. It is possible to have a simple distributed system, but the temptation is to take advantage of all the possibilities distribution allows rather than stripping it down to its most basic functioning elements.

Simplification means the acceptance that some things need to be left out to create the space for their flourishing. By trying to include everything from the beginning results in an overcrowded space where limited growth happens. We can see this in Anya Morris, Joanne Hardman and Heather Jacklin's paper on school science for six-year-olds, where they find the absence of entry-level scientific concepts in the Grade R curriculum. Curriculum texts at Grade R level mostly represent science knowledge in terms of everyday concepts, with very little opportunity to acquire the form or content of scientific knowledge or to develop the cognitive skills needed for formal schooling. The first question we need to ask is why should Grade R have simple scientific concepts? Is it not enough for the children to be habituating themselves to schooling in a world that is as close as possible to home but still different enough to encourage the shift? The everyday world and its concepts also need a space to become familiar and learnt; for it is not automatically taught or learnt, and this has to be done whilst getting used to many hours away from home in a controlled environment in terms of time, space and physical movement. At six years of age they *might be capable of* understanding simple scientific concepts, but that does not mean they should. I am not sure I am unhappy to find out there is not much potential science in Grade R, but what I am happy about is a clear articulation in the paper about the neo-Vygotskian shift from everyday concepts to simple scientific concepts to complex scientific concepts. There has been a tendency in South African educational debates to get fixated on learner centred and teacher centred education, rather than simple and complex systems and how they play out in terms of curriculum and pedagogy. Morris, Hardman and Jacklin provide us with an exemplary account of the shift from everyday concepts to simple concepts and complex concepts.

It is this shift from everyday to simple to complex that should have been the focus of the Malawian curriculum reform in 2007, but that was not the case, instead the reform was all about shifting pedagogy from a teacher centred to a learner centred modality and from a separated curriculum to an integrated curriculum. Instead of starting where teachers were in a traditional context used to hierarchical relations and specified content learning, the reform radically opened the relations out and integrated knowledge. No surprises then, that Devika Naidoo and Grames Chirwa find the teachers in Malawi failed to respond to the reform in any meaningful way, resulting in great disparities between the intended and enacted curriculum, all because there was a refusal to start off the reform by radically simplifying the space. You do not simplify by changing both the curriculum and the pedagogy – you simplify by taking what you already have, stripping it down to essentials, and using it as your base from which more complex possibilities have the space to emerge, slowly and tentatively at first, but with increasing vigour once they find they have the space to breathe.

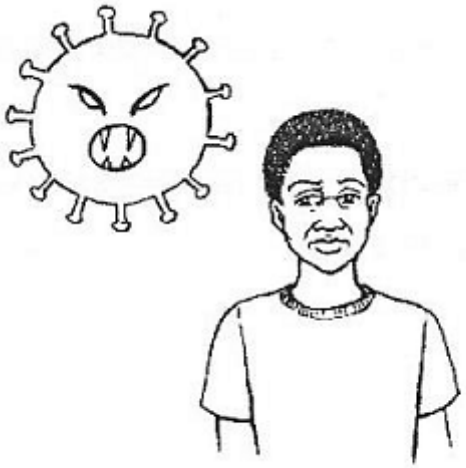
But we have to be very careful about how we simplify something down to its bare essentials. It is never just about a technical reduction of complexity, but also always about the context it is located within. We can use Kathy Arbuckle's fascinating account of visual literacy amongst adult learners in KwaZulu-Natal to illustrate the point. Here is an account about the possible difficulties 'village people' have with drawings taken from Arbuckle's paper.

> Village people gain their knowledge through handling, creating, or looking at actual objects or events. When they see a picture, they expect it to contain what they know about the object and not only what they see of the object. A photograph or drawing of a man in which only one leg and one arm is visible will not necessarily be recognised as a man. A drawing of a truck in which only two wheels can be seen will not correspond to what people know about trucks. In an image which shows perspective, two objects of the same size, one farther away than the other, may be perceived as two objects of different sizes. . . . It should be remembered that pictures which contain shading and foreshortening may be read literally: the person may be seen to have a scarred face or a short limb, or lack the limbs which are not visible. . . . Learners need to be introduced to images and taught to read and interpret them, just as they are introduced to words (Fordham, P., Holland, D. and Millican, 1995, p.81).

But even if all of these issues are taken into account, it still does not mean the picture will be understood. So, based on the above quote, we might be fearful that the depicted person has no arms or legs, but solving that issue in no way helps us make sense of the picture. What is needed is the context that the picture is speaking to – in this case the emotional impact of the HIV/AIDS

virus. The issue does not have to do so much with whether arms are missing, but whether the person can read enough to understand the context generating the picture. If the person cannot read, then visual literacy will be of no assistance whatsoever and merely increase confusion.

Simplification always needs a context. The art of pedagogy is to ensure that the expansion of context starts to shift into larger and more systematic networks that enable meaning making to happen. Simplification is not an end to itself; it is about enabling the dynamic growth of organised, complex networks in a space that is not itself overburdened by complexification.



Wayne Hugo
School of Education
University of KwaZulu-Natal

hugow@ukzn.ac.za