Transnational Curriculum inquiry
The Journal of the International Association for the Advancement of Curriculum Studies

Fear and Cheating in Atlanta: Evidence for the Vulnerability Thesis

Steven K. Khan[1]
University of Calgary, Canada

Introduction – Foreground

On June 30 2011, the Special Investigations arm of the Office of the Governor of Georgia delivered its report on test-tampering (cheating) in Atlanta Public Schools (Bowers, Wilson & Hyde, 2011). Based on the analysis of over 2000 interviews and more than 800,000 documents the report offers a window into how a pervasive culture of testing – when unethically administered – can lead to actions that are not in the best interest of students' learning. It presents an almost unbelievable drama of administrative misconduct and ethical failures that reads at times like a corporate mob-story with whistleblowers, corruption, cover-ups, humiliations, retaliations, (professional) terminations, interference, alteration and destruction of evidence, non-cooperation, non-compliance and a conspiracy of silence that at times bears a strong resemblance to the dystopic educational science fiction scenario presented in *The Perfect Test* (Deitel, 2011) or the realist representation of some dysfunctional aspects of an educational system as portrayed, for example, in Season 4 of HBO's television series *The Wire*.

On March 29 2013, former Atlanta Public Schools (APS) Superintendent Dr. Beverly Hall and 34 Atlanta educators were indicted by a grand jury on 65 charges that include racketeering, criminal conspiracy, theft, and making false statements. When Superintendent Hall was given the responsibility for managing APS in 1999 she implemented a series of reforms under the banner of "data-driven systems" for assessment and accountability. Annual targets were set for schools by the district based on the previous year's performance on the state of Georgia's Criterion-Referenced-Competency Test (CRCT[2]) and bonuses for individuals were tied to meeting these targets. As the investigators note however,

> data can be properly used as a tool to assess academic progress. But data can also be used as an abusive and cruel weapon to embarrass and punish classroom teachers and principals or as a pretext to termination…Dr. Hall and her staff used data as a way to exert oppressive pressure to meet targets. (Bowers et al. 2011, p.354)

It is not my intent in this paper to examine the merits of these indictments or to offer personal opinion on the case. Such a task is better suited to a court of law and to commentary by legal scholars (eg. Schall, 2013, quoted in Downey, 2013). My purpose here is to argue that what is documented as having occurred in some Atlanta Public Schools during the decade of Dr. Hall's tenure as Superintendent perhaps provides some of the missing empirical evidence for what has come to be called (Raymond E.) Callahan's Vulnerability Thesis

TO CITE THIS ARTICLE PLEASE INCLUDE ALL OF THE FOLLOWING DETAILS:
Khan, Steven K. (2014). Fear and Cheating in Atlanta: Evidence for the Vulnerability Thesis. *Transnational Curriculum Inquiry volume* 1
http://nitinat.library.ubc.ca/ojs/index.php/tci <access date>

(1962). In this way I want to directly connect the ideas of a half-century old text with events that recur in the present. My reason for doing so is grounded in a belief that there is value in revisiting aspects of our heritage in education and curriculum studies in order to buttress and reinvigorate under-utilized concepts with new and relevant evidence which have potential to revitalize curriculum discourses for the next moments. This is a task in which we, perhaps, engage too infrequently as we work assiduously to keep abreast of the deluge of papers on the latest 'theories'.[3] But it is a necessary task for the field going forward further into the 21st century.

More speculatively I believe that the study of educators' vulnerabilities across levels will need to be attended to by curriculum scholars in the next moment and suggest that in developing new ways to investigate, theorize, speak and write about such vulnerabilities, new frameworks and dispositions will need to be developed.

Raymond Callahan, *Education and the Cult of Efficiency,* and the Vulnerability Thesis

Raymond E. Callahan (1922 – 2010) was professor of Education at Washington University, St. Louis. He is most well-known for his historical text, *Education and the Cult of Efficiency: A study of the social forces that have shaped the administration of the public schools* (1962)[4]. He was among the first post-Sputnik scholars to *comprehensively* document and chart the socio-historical rise to power and prominence of business ideology in American education and to *convincingly* argue against some of its most pernicious effects when indiscriminately and uncritically embraced by educational administrators. However, it is the vulnerability thesis – that "the extreme vulnerability of [American] schoolmen to public criticism" (1962, p.ii) explained the "extent and degree of capitulation by administrators to whatever demands were made upon them…not on educational grounds, but as a means of appeasing their critics in order to maintain their positions in the school" (p.ii) – that has continued to generate the most debate/discussion and which I draw upon here in addressing the questions and issues stirred-up in the wake of the Bowers, Wilson and Hyde (2011) investigative report on test-tampering in Atlanta Public Schools (APS).

The Cult of Efficiency

Education and The Cult of Efficiency[5] was the result of Callahan's attempt to understand, "the origin and development of the adoption of business values and practices in [American] educational administration" (p.i) as well as the consequences of this adoption. Drawing on a careful analysis of a wide cross-section of academic, archival, and popular sources (eg. magazines), he presented an in-depth social-historical analysis of the individual personalities and socio-cultural forces that influenced the actions of educational administrators in the first three decades of the 20th century through which business values, practices and ideology had come to influence, if not dominate the culture of American educational administrators and schools. His main conclusions were that the adoption had started around 1900 reaching an apogee by the 1930s and that this phenomenon could "be explained on the basis of the extreme vulnerability of [American] schoolmen to public criticism and pressure and that [such] vulnerability is built into [the American] pattern of local support and control" (p.ii). This latter explanation is what has come to be known as the vulnerability thesis.

Choosing to begin in 1900 he made a connection among the visible successes and ideological prestige and influence in the American psyche of science, business and industry

in the 19th century (p.1) together with demands for more utilitarian (p.9), vocational or practical curricula (p.8) within a context of mass immigration, semi-literacy, cultural diversity, poverty, inflation and suspicion of inefficient institutions (p.2, p.15),with the emergence of a cadre of experts who advocated for the application of "modern business methods" and "efficiency" and connected these in the public mind with progress and reform" (p.5) in achieving educational ends.

His research implicated newspapers, journals, books, speeches at educational meetings, professional educators and the actions of school boards in exerting pressure to adopt business methods (pp.5-6) which together resulted in a "fairly well standardized" procedure for "bringing about a more businesslike operation of the schools" that "consisted of making unfavorable comparisons between the schools and business enterprise, of applying business-industrial criteria to education, and of suggesting that business and industrial practices be adopted by educators" (p.6). In short he took the curricula of 'American culture' as represented in popular as well as scholarly artifacts very seriously. Finally, he demonstrated how in the period following the First World War, marketing and the science of propaganda's potential for shaping and directing public perception of business and creating "good will" (p.223) now revealed, would give rise to the public relations expert, who, like his efficiency expert counterpart of the earlier era, would bring fresh ideas and insight gleaned from business and industry into the educational realm and cement the standardization of the operation of schools as a "businesslike organization" (Callahan, 1962, p.6).

In the present moment these historical reminders of how business ideology, values and methods colonized the American educational mindscape seem trite. Indeed, as Callahan (1996) himself reflected, "I thought that *Education and the Cult of Efficiency* would be a very controversial book. Surprisingly it was not. Perhaps that was due to the sheer weight of the evidence" (p.9). Apart from the poignant reminder of the value of careful, cautious scholarly research of socio-historical phenomena, the lasting value of the work perhaps is to be found in the at the time very tentative explanation that he gave for the emergent question, "Why, why did they do it?" (Callahan, 1996, p.10) – more commonly referred to as the vulnerability thesis.

The Vulnerability Thesis

In the preface to *Education and the Cult of Efficiency* Callahan (1962) writes,

> I am now convinced that very much of what has happened in American education since 1900 can be explained in the basis of the extreme vulnerability of our schoolmen to public criticism…the point is that when the schools are being criticized, vulnerable school administrators have to respond… (p.ii)

In particular Callahan was concerned with the developments in the Superintendency during the period under consideration, noting that, "because of the nature of their position in the schools and of their vulnerability to public opinion and pressure, it was the superintendents who interpreted and applied scientific management as well as other business methods to education" (p.148) with the result that superintendents' roles took on "more of the characteristics of a managerial job in business than it did of an educational one in the schools" (p.148). He argued that because of the way American public school systems were financed and organized, "largely through property taxes" (p.ii), superintendents, and those responsible

for educational administration who perennially found their security of tenure vulnerable to public criticism and subsequent dismissal in order, "to keep their jobs, to survive economically…to convince their critics and their school boards that they were running the schools in a businesslike way" (Callahan, 1996, p.11), subordinated "educational questions…to business considerations" (p.246). In this way, he argued they often abdicated their leadership responsibilities as educational leaders by yielding to the external demands for the application of business methods in education with neither sufficient nor appropriate considerations as to whether such methods were suited to educational goals beyond efficiency, standardization and accountability.[6]

Similarly, he argued that teachers' instructional focus over the same period (and since then) had shifted to student/class management as they had come to adopt and implement some of the business strategies in their classrooms in order to please their administrators and their school boards which had become dominated by businessmen. An appropriate analogy for this situation might be an epidemiological cascade. He criticized the corporeal fear of dismissal describing it as a "knife poised at their financial jugular vein each year" as undermining the possibility of their "professional autonomy" (p. iii) and recommended, "seek[ing] ways and means of reducing the extreme vulnerability" (p.iii) of superintendents that included concurrent changes in the organization and financing of school systems and improvements in the quality of the preparation of educational leaders in Universities.

While the vulnerability thesis is a reasonable hypothesis, Callahan's text lacked the same comprehensive and convincing empirical evidence and rigorous scholarship that he provided to explain the rapid adoption of business ideology in the US in the first decades of the 20th century. Consequently, while the socio-historical dimensions of *Education and the Cult of Efficiency* are widely accepted and are part of the common fund of knowledge in several fields, the psycho-social dimension of the vulnerability thesis proved and has continued to be controversial.

APS as evidence for the vulnerability thesis.

> Many principals humiliated teachers in front of their peers for failing to meet targets. For example, at Fain Elementary School, the principal forced a teacher to crawl under a table in a faculty meeting because that teacher's students test scores were low. (Bowers et al, 2011, p.355)

> Pressure to meet targets and improve students' CRCT scores was the single most frequent explanation given by teachers for why they cheated. Most teachers, and many principals, described an oppressive environment at APS where the entire focus of the district had become achieving test scores rather than teaching children. (Bowers et al, 2011, p.356)

> Michael Milstead was the principal at Harper Archer Middle School from 2006 to 2009. He noticed a discrepancy between students' high CRCT scores in elementary school and their poor academic performance. Many of these students were several grade levels behind academically, and Milstead suspected that some of these students had inflated CRCT scores…Mr. Milstead raised [the issue] in a May 2008 meeting…Executive Director Tamara Cotman later confronted Milstead about his

> comments…After Cotman informed him that his services would no longer be needed in the district, Michael Milstead resigned. (Bowers et al, 2011, p.361)

Callahan's insistent question, "Why, why did they do it?" is one of the questions asked and addressed in the Bowers et al. (2011) report on test-tampering (cheating) in Atlanta Public Schools. The investigative report found "widespread cheating" and "organized and systemic misconduct" related to the state of Georgia's Criterion-Referenced-Competency Test (CRCT) going back almost a decade. The misconduct included: Teachers and administrators erasing students' incorrect answers after the test and filling in the correct answers (wrong-to-right erasure); arranging classroom seating so that lower performing children could cheat off the higher scoring students; teachers inflecting their voices while reading the test to identify the answer in lower grades; teachers pointing out correct answer while standing at students' desks; and teachers looking ahead to discuss the next day's questions. It is these stories of teachers, principals and administrators in the report (Volume III), excerpts of which I used to frame the opening of this section, that constitute the strongest direct evidence for Callahan's vulnerability thesis.

The report identifies three inter-related factors which contributed to the crossing of ethical lines. Firstly, the annual targets set by the district were "often unrealistic" (p.350) and "unreasonable pressure" (p.350) was put on principals and teachers to achieve these targets. Secondly, "a culture of fear, intimidation and retaliation spread throughout the district" (p.350). Justified fears of termination and public ridicule contributed to creating and promoting a culture and "conspiracy of silence that kept many teachers from speaking freely about misconduct" (p.2) And thirdly, the superintendent and her administration "emphasized test results and public praise to the exclusion of integrity and ethics" (p.350). As the investigators state those at the top, "accepted accolades when those below them performed well, but they wanted none of the burdens of failure" (p.3), refusing to "accept responsibility for anything other than success" (p.3) and valuing public image more than the truth (see p.401). The report concludes that Atlanta Public Schools "became such a "data-driven" system, with unreasonable and excessive pressure to meet targets, that Dr. Hall and her senior cabinet lost sight of conducting tests with integrity" (p.405) and that "Dr. Hall failed to balance the data-driven environment she created with an equal focus on the importance of integrity in achieving these goals" (p.365). Once school officials began to tamper with students' tests – and because of the way those results were fed back into creating the next year's targets – they created a self-amplifying complex system – an expanding bubble – which compounded their complicity annually and herded the system towards a cascading if not catastrophic failure. As the investigators describe, "to maintain the gains of the past years while achieving the target of the current year required more cheating than in prior years" (p.355), meanwhile, "the gap between where students were academically and the targets they were trying to reach grew larger" (p.355).

Though the vulnerability thesis is not referenced anywhere in the Bowers et al. (2011) report, the details and stories in the report provide a very strong warrant for Callahan's claim. With funding, employee bonuses and rewards directly tied to meeting increasingly unrealistic district targets, unreasonable pressure on teachers and principals coupled with the establishment of "a culture of fear intimidation and retaliation" (p.350) and an over-emphasis on test results and public perception to the exclusion and detriment of integrity, ethics and individual student progress. In this district the knife poised at the financial jugular of principals, teachers and school officials likely felt very real. For example, the district

superintendent is reported as declaring an intention to replace principals who did not meet targets within three years, and followed through by replacing 90% of principals during her tenure. The authors note that, "[t]he monetary bonus for meeting targets provided little incentive to cheat. But *fear of termination and public ridicule* in faculty and principals meetings drove numerous educators to cross ethical lines" (p.355, italics added).

The incidents described in the report directly affected thousands of children, preventing some from accessing remedial instruction and resources in a timely fashion and feeding forward false information about the system's health. Once 'the data' and 'the numbers' begin to take priority over 'people' and their 'experiences' we ought to begin to get concerned. For leaders the report strongly suggests the importance of connecting with people in the field with most direct contact and access to the phenomenon that one wishes to positively influence in order to put a human face and link actual learner experiences with what 'the numbers' say. As Ladd (1971, 1973, cited in Wisener, 1996) suggests,

> the vulnerability that causes superintendents and administrators to continue to operate schools like bureaucratic corporations has, resultantly, indoctrinated the educational mentality of the judicial system to the detriment of student freedom and discipline. As such, students are often deprived of their rights and victimized by trickle-down vulnerability [and] explains why school systems have developed into sprawling and "vulnerable bureaucracies in which every significant initiative from below threatens to be disruptive" (p. 52)

The vulnerability associated with superintendents ripples and moves, exerting effects throughout the educational system, especially on those most vulnerable, teachers and students who, like the superintendents, learned how to survive in such a system.

A vulnerability system

An appropriate description or conceptualization of the pervasive culture that existed in APS during the first decade of the 21st century is that of a "vulnerability system" as proposed by Jules Henry (1966), i.e. the set of social factors that make humans vulnerable. Henry argued that in order for a society to survive it must "make men vulnerable" since, he reasoned, "[i]f a man is invulnerable society cannot reach him, and if society produces men who cannot be reached it cannot endure" (Henry, 1966, p.135). While the concept of "too big to fail" had not yet entered the popular and educational discourses with the particular shades of emphases that exist in the present economic formulation, Henry's idea can be taken as expressing a proto-sentiment that we are perhaps only now bearing witness to in education on a more global scale[7].

Henry suggests that beginning with the vulnerability of one's reputation (see the earlier quote about public ridicule from the report) which leads individuals to police and conceal their thoughts, utterances and actions in order to achieve a measure of social invulnerability, the vulnerability system works by conflating one's identity through reputation with destiny, by "degrading the inner self to second, third, or merely adventitious place, and making the social face supreme, so that every step [is] sacrificed to the façade" (Henry, 1966, p.136). Next Henry argues that one function of the feeling of vulnerability is to make us dependent on those who are capable of protecting us and fearful of those who could wound us further. This vulnerability-dependency dyad becomes embodied in different

images of authority figures which underlie society's fears of its individual and collective vulnerabilities and its concomitant dependencies.

In elementary education he suggests that teachers are the agents of such vulnerability who, through their power to discipline, fail and punish, begin to shape students' reputation in relation to a mythology of success through fear. Such shaping begins in early childhood and intensifies through college and graduate school according to Henry in which the "fear of failure is the dark aspect of the hope and striving for success" (Henry, 1966, p.137).

The overall result for society, according to Henry, is that in order to reduce (the perception of) vulnerability, individuals must be educated to be fearful of authority, passive, evasive of critical analysis and neutral in opinion. Henry equates these attitudes with anti-intellectualism and strongly denounces such as "stupidity". Such widespread "stupidity" Henry proposes is at the root of "incompetence" in American culture and he finds it in every educational institution, "embalmed curriculum" (p. 138) and bureaucracy. It is stupidity and incompetence in this sense that occurred in Atlanta.

Henry concludes that social change is prevented as "the people who are in the positions most strategic for social change are usually the most vulnerable" (Henry, 1966, p.140), as were Callahan's superintendents and other educational administrators, as were the teachers, principals and administrators under Dr. Hall and as are teachers and students at all levels. And, as I believe, might be the case with Dr. Hall also.

The claim that Dr. Hall should be considered vulnerable may be a little controversial and less appealing as the ongoing media representations work to take back the unwarranted accolades and unfounded basis for Dr. Hall's reputation. She too, despite her privileged positioning can be seen as suffering from the effects of a vulnerability system in education intertwined with (North American) vulnerability compounding legal and media cultures. In writing this piece for example I have tried to enact what I have called elsewhere (Khan, 2012) intervulnerable critique – an attending to the mutual vulnerabilities of Dr. Hall and others in APS as human beings and myself as scholar writing and representing aspects of their actions in a way that keeps these (and other unanticipated and perhaps unknowable) vulnerabilities ever at the forefront (see also Gilson (2011) on ignorance and epistemic vulnerability) and as a perpetual reminder that even those in positions of power and privilege are "vulnerable subjects" (Fineman, 2008).

Ceasing the fear and manipulation of individuals' feelings of vulnerability is the core of Henry's proposal for bringing to a close the chapter on education for idiocy, stupidity and incompetence. In this way, according to Henry, humans would not learn to fear their vulnerabilities nor would they become indifferent and complacent in thinking themselves invulnerable. It is not that humans, or to expand the concept via a more ecological framing – biological life – and perhaps even further – organically arising complex forms – should 'forget' that they are vulnerable, but rather, it is that *fearing* one's and other's vulnerabilities and seeking means, mechanisms and methods for (a false sense of) invulnerability should and can no longer be a basis for sound or humane curriculum or educational decision-making. Again, the evidence from the report into cheating in APS supports this. Learning to appreciate, actively value without commodifying relationships of mutual and co-constitutional interdependencies and intervulnerabilities (Khan, 2012; see also Henderson, Davis & King, 2004) is perhaps one of the tasks to which curriculum studies will have to turn in the next moment[8].

'Vulnerability' as leitmotif for 21st century curriculum

> To richly theorize a concept of vulnerability is to develop a more complex subject around which to build social policy and law… (Fineman, 2008, p.1)

> A carefully developed account of vulnerability will assist in understanding the ways in which institutions and practices…shape people's inherent and situational resilience and vulnerabilities; and in developing respectful responses to these vulnerabilities. (Rogers, Mackenzie & Dodd, 2012, p.32)

Proposing a theory of vulnerability obviously requires more than a recitation of lists of people presumed

> to be vulnerable…A theory of vulnerability…should be able to draw on empirical facts and circumstances in order to explain why some individuals or groups are more prone to disease, illness, injury, psychological harm, or death than other individuals or groups. (Macklin, 2012, p.70)

The concept of vulnerability is currently being rethought and retheorized on a number of different fronts, including the law (Fineman, 2008), research on human subjects (Levine et al., 2004) and nonhuman animals (Thierney, 2011), public health and disease (Bluhm, 2012), globalization (Kirby, 2011), human trafficking (FitzGerald, 2012), and bioethics (Rogers, Mackenzie &Dodds, 2012). Many of these are grounded in feminist ethics (eg. Cadwallader, 2012; Knisley, 2012) and seek to move the conversation around vulnerability beyond that of risk and harm based discourses. To these are added psychologically pressing concerns and anxieties about inter-related and connected systemic vulnerabilities that permeate bodily, personal, social, political, financial, economic, ecological, and mytho-spiritual spheres of life and generalized fear of ruin.

Assuming for the moment that this trend continues and is compounded we are likely to see vulnerability emerging as a key if not strategic theme in education in this century as all of the areas to which the concept applies are addressable to varying degrees throughout the educational system. Further, if Callahan and Henry's descriptions and analyses are correct, then the vulnerability creating and maintaining system of education and schooling is a sensible place to work to interrupt current and historical notions of vulnerability/invulnerability and theorize new and different conceptions.

As the very short and select list of references above demonstrates, the work of theorizing vulnerability and developing legal, philosophical and policy frameworks has already begun in a number of fields. Education and curriculum studies are perhaps yet to engage explicitly and confidently in these conversations. But as I have demonstrated with Callahan and Henry, our scholarly heritage contains some dormant seeds that perhaps are only now finding the right set of conditions for germination but will require more mindful attention.

Perennial and emergent issues of concern to educators and education researchers such as those that arise in considering different embodiments socially located (disability, gender, race, stereotypes, sexual orientation, religious/belief orientation etc.), other concerns such as those relating to mental and physical well-being (eg. anxiety, bullying, testing, cheating, coercion, discrimination, poverty, school violence), urban and rural education etc., as well as more theoretically inclined discourses around for example cosmopolitanism, social justice,

decolonial thinking and eco-spirituality well-being in education may well benefit from (re-)considering and testing the boundaries of the concept of vulnerability. In the interest of space and within the genre of the academic journal article, I have not developed these streams of thought in this paper.

While invulnerability and its fiction of independence, I would argue, emerge from a psychopathology of fear, vulnerability, its other, is constructed socially and individually as a psychopathology of power/knowledge. Individuals and institutions with power/knowledge – teachers, schools, researchers etc. – through their capacity to position and enforce vulnerability and woundedness as *'lack'* of power, knowledge, and agency, construct, and regulate deficit discourses which attempt to discipline, silence or co-opt for their own purposes, any disruptive or unruly forms of difference. Educators at all levels will need to be vigilant, especially given the level of trust placed in teachers across all levels but especially at those levels where government-administered high-stakes standardized testing is used. As Callahan's analysis revealed, some of the pathology linked to Henry's vulnerability system is generated by practitioners in Higher Education and certified/credentialed through programmes in higher educational institutions including perhaps those in which we work. Studying the vulnerabilities of educators while being vulnerable oneself in a variety of ways will likely prove a challenging but productive problematic for educational theorizing and the study of curriculum.

Conclusion

The discourse and enactments of many educational systems around the planet have come to be oriented by a scientifically minded business ethos and ideology (Giroux, 2007, Welch, 1998). This is incorporated in a desire for and practices of technological solutions, managerial accountability, standardized assessment, and hyper-competition towards an end of generating a consistent and reliable 'product' efficiently and economically. The "data-driven" social-scientifically trained experts of today tasked with managing such school systems trace a recent common ancestry though the business-minded efficiency and educational cost-accounting experts and the psychological marketing training of public-relations experts of the first half of the twentieth century.

Similar to Callahan's (1962) argument that no reasonable person, "can deny the advisability of applying certain business practices where they are *appropriate* to the work of schools" (p.177, italics added), I believe that data-rich psychological and social science methods do have a role to play in designing curriculum, working towards improved outcomes from schooling for all, and informing educational decision making today. As Callahan argued, it was not the "borrowing from business and industry" that contributed to the tragedy but "in adopting values and practices *indiscriminately* and applying them with little or no consideration of educational values or purposes (p.244, italics added). More than 50 years later, Bowers et al. (2011) echo a similar sentiment about educational targets that exemplifies both Callahan's and Henry's theses about vulnerability in education. They write that, while

> [w]e do not express any opinion as to the merits of targets…targets were implemented by APS in such a way that teachers and administrators believed they had to choose between cheating to meet targets or failing to meet targets and losing their jobs. (p.351)

Business, Psychological science and Social science, provide means not ends, and as Callahan (1962) reminds "the end being to provide the best possible education for our children" (p.177).

As the Bowers, Wilson and Hyde (2011) report on cheating in APS demonstrates beginning to cheat is a sticky web from which it is not easy to extricate oneself. To use another metaphor, it can create ever expanding educational bubbles – which must eventually burst – whose very existence and eventual collapse endangers the faith and trust placed in the entire learning enterprise.

Notes

[1]st.khan@ucalgary.ca

[2] The CRTC is an annual multiple choice examination of five subject areas given to public school students in Georgia as part of the No Child Left Behind (NCLB) policy (see Bowers et al., 2011, pp. 5-6, for additional details).

[3] This is grounded in complexity informed thinking and recent calls for balancing "big-data" with "long-data" as argued by Arbesman (2013) for example which I take as being analogous to a call for system-level biographies. My time-scale in this paper is more moderate.

[4] Since its publication more than half a century ago, *Education and the Cult of Efficiency* has been an oft-cited text, embraced by scholars across disciplines including anthropology, law, management, the history of medicine and incarceration in addition to educational administration and curriculum studies (see Iannacconne, 1996; Lutz, 1996; Wisener, 1996 for extensive bibliographies). In Curriculum Studies more specifically, Elliott Eisner (1979, cited in Wisener, 1996) counts Callahan's work in explaining the reluctance to integrate and address artistic and aesthetic modalities in educational administration while Schubert et al. (2002) cite it as a landmark historical critique of the social efficiency movement in North American curriculum and education. In Curriculum Studies Callahan's text warrants passing mention for example in Schubert et al. (2002) as a landmark historical critique of the social efficiency movement in curriculum and education and receives a single citational acknowledgement in the synoptic *Understanding Curriculum* (Pinar et al., 1995) and no mention in the *Encyclopedia* (Kridel, 2010). Its location, bridging mid-century social efficiency curriculum discourses and the first stirrings of Reconceptualist theorizing is very suggestive however.

[5] The book is divided into 10 chapters. The first four trace the rise of the efficiency experts in the first three decades of the twentieth century and the next three describe the entrenchment of the factory system in American education. The last three chapters, respectively, describe the establishment of a new "type of school administrator" through the work of professors of education, how the efficiency expert would be joined by his progeny, the public relations expert and concludes with several suggestions for addressing the phenomenon which Callahan refers to as an 'American Tragedy in Education.'

[6] We can draw a line from this point to explain the emphasis on the data-driven accountability methods that have become characteristic of the discourse in education and which were heavily deployed in APS under Hall and her colleagues.

[7] Atlanta is likely not the only city with pervasive testing, unreasonable demands being placed on educators' shoulders, fearfulness of one sort or another being used to enforce compliance, and cheating and other educationally suspect if not illegal behavior.

[8]See for example Khan (2011).

References

Arbesman, S. (2013). Stop hyping big data and start paying attention to 'long data'. (Opinion, 29 Jan) Retrieved from http://www.wired.com/opinion/2013/01/forget-big-data-think-long-data/ on April 03, 2013.

Bluhm, R. (2012). Vulnerability, health, and illness.*International Journal of Feminist Approaches to Bioethics*, *5*(2), 147–161.

Bowers, M. J., Wilson, R. E. & Hyde, R. L. (2011). Report of the overview and findings of the special investigatory committee set up to investigate cheating in Atlanta Public Schools (Vols. I – III).Office of the Governor Special Investigations. Retrieved from http://graphics8.nytimes.com/packages/pdf/us/Volume-1.pdfhttp://graphics8.nytimes.com/packages/pdf/us/Volume-2.pdfhttp://graphics8.nytimes.com/packages/pdf/us/Volume-3.pdf on April 2, 2013.

Cadwallader, J. R. (2012). (Un) expected suffering: The corporeal specificity ofvulnerability. *International Journal of Feminist Approaches to Bioethics*, *5*(2), 105–125.

Callahan, R. E. (1962). *Education and the Cult of Efficiency: A study of the social forces that have shaped the administration of the public schools*. The University of Chicago Press.

Callahan, R. E. (1996). Foreword.*Peabody Journal of Education, 71*(2), 1-14.

Deitel, R. (2011). *The Perfect Test.* Rotterdam, The Netherlands: Sense Publishers.

Downey, M. (2013). Criminal indictment of Beverly Hall: Is it illegal to be an overly demanding boss? Posting retrieved from http://blogs.ajc.com/get-schooled-blog/2013/04/02/criminal-indictment-of-beverly-hall-is-it-illegal-to-be-a-demanding-leader/?cxntfid=blogs_get_schooled_blog on April 02, 2013.

FitzGerald, S. A. (2012). Vulnerable bodies, vulnerable borders: Extraterritoriality and human trafficking. *Feminist Legal Studies*, *20*(3), 227–244. doi:10.1007/s10691-012-9210-0

Gilson, E. (2011). Vulnerability, ignorance, and oppression. *Hypatia*, *26*(2), 308–332.

Giroux, H. (2007). *The University in Chains: Confronting the Military-Industrial-Academic Complex*. Paradigm Publishers.

Henderson, G. E., Davis, A. M. & King, N. M. P. (2004). Vulnerability to influence: A two way street. *The American Journal of Bioethics, 4*(3), 50-52.

Henry, J. (1966). Vulnerability in education. *Teachers College Record, 68*(2), 135-145.

Iannacconne, L. (1996). Callahan's vulnerability thesis and dissatisfaction theory. *Peabody Journal of Education, 71*(2), 110-119.

Khan, S.K. (2011). Towards a complicated conversation among Disability Studies, Complexity Thinking, and Education. *Journal of the Canadian Association of Curriculum Studies (JCACS), 9*(2), 5-29.

Khan, S.K. (2012).*Rehearsing a maroon mythopoetics in mathematics education through consideration of an artefact of mathematics popularization (the pedagogic film All is Number).* Unpublished doctoral dissertation, University of British Columbia, Vancouver, Canada. Available at https://circle.ubc.ca/bitstream/handle/2429/43490/ubc_2012_fall_khan_steven.pdf?sequence=1

Kirby, P. (2011). Vulnerability and globalization: The social impact of globalization. In Bryan S. Turner (Ed.) *The Routledge International Handbook of Globalization Studies* (pp. 114 – 134). New York: Routledge

Knisely, L. C. (2012). Oppression, normative violence, and vulnerability: The ambiguous Beauvoirian legacy of Butler's ethics. *philoSOPHIA, 2*(2), 145–166.

Kridel, C. (2010). *Encyclopedia of Curriculum Studies*. CA: Sage Publications Ltd.

Levine, C., Faden, R., Grady, C., Hammerschmidt, D., Eckenwiler, L. &Sugarman, J. (2004). The limitations of vulnerability as a protection for human research participants.*The American Journal of Bioethics, 4*(3), 44-49.

Lutz, F. W. (1996). The best laid plans of mice and men: A note on intent. *Peabody Journal of Education, 71*(2), 120-123.

Lutz, F. W. & Wisener, B. F. (1996).Vulnerability of humankind. *Peabody Journal of Education, 71*(2), 86-95.

Macklin, R. (2012). A global ethics approach to vulnerability. *International Journal of Feminist Approaches to Bioethics*, *5*(2), 64–81.

Pinar, W. F., Reynolds, W. M., Slattery, P. & Taubman, P. M. (1995). *Understanding Curriculum*. New York: Peter Lang.

Rogers, W., Mackenzie, C., & Dodds, S. (2012). Why bioethics needs a concept of vulnerability. *International Journal of Feminist Approaches to Bioethics*, *5*(2), 11–38.

Schubert, W. H., Schubert, A. L. L., Thomas, T. P. & Carroll, W. M. (2002). *Curriculum Books: The first hundred years.* New York: Peter Lang.

Thierman, S. (2011). The vulnerability of other animals. *Journal for Critical Animal Studies, IX* (1/2), 182-208.

Welch, A. R. (1998). The cult of efficiency in education: comparative reflections on the reality and the rhetoric. *Comparative Education*, *34*(2), 157-175.

Wisener, B. F. (1996). Influence of Callahan's vulnerability thesis on thought and practice in educational administration, 1962-1992. *Peabody Journal of Education, 71*(2), 41-63.

Submitted: April, 4th, 2013

Approved: October, 28th, 2013