### (RE)CONSIDERING THE NEUTRALITY OF CARE: THE CASE OF BODY MASS INDEXING IN SCHOOLS

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Policy and practice devoid of empirically informed theory, especially in intensified conditions of school work, is likely to beget ideology, inequity, poetry or fascism rather than 'better education' and social democratic ideals.<sup>1</sup>

The *problem* of overweight and obesity among children and youth has received a tremendous amount of attention by government agencies, public health officials and within popular presses. The issue has been dubbed everything from a national epidemic to a global health crisis.<sup>2</sup> Reports often paint a grim clinical portrait of an ever expanding (literally and figuratively) number of unhealthy, overindulgent and inactive children. Despite the dominance of the message that obesity represents a certain health crisis, a growing number of social scientists have recently started to call into question the epidemiological evidence upon which many of these crisis claims rest. These researchers point to evidence that suggests that many obesity-related claims have been, for a variety of reasons, exaggerated. While it is beyond the scope and aim of this of this paper to engage in a debate surrounding the authenticity, validity and reliability of claims related to problem of obesity, it is important to note that this debate exists. Moreover, this critical literature influences my understanding of the issue and correspondingly, shapes my own theoretical commitments.

Social policy solutions to the problem of overweight and obesity among children very often implicate schools for being a logical, convenient and natural site of intervention. Schools across the country have been encouraged to "explore creative" strategies to prevent, identify and reduce obesity among children.<sup>5</sup> Somewhat unsurprisingly, for many schools creativity comes in the form greater assessment, measurement and standardization or, more specifically, performing annual Body Mass Index (BMI) tests on students.<sup>6</sup> BMI testing involves measuring and recording a child's weight, height and age and plotting these on a gender specific graph that delineates percentile cutoff points. Depending on where a child's individual data falls on the graph, the child is categorized as underweight, normal, at-risk for overweight or overweight. Following the assessment, schools are instructed (or, in some cases legislated) to send each child home with a "BMI Report Card," a summary of their personal weight evaluation and corresponding body classification. Along with the BMI Report Card a number of schools are further obligated to send parents a memorandum detailing "recommendations for simple weight loss

programs" for which the overweight child could "attempt to lose weight." Currently, 16 states have legislation in place that mandates annual BMI testing in schools.

In many ways, educational policies such as BMI testing are instrumental in constructing and shaping discourses surrounding the alleged problem of overweight as well as the appropriateness and efficacy of school-based interventions promising to ameliorate this. BMI testing is depicted and justified as a politically neutral and necessary intervention ostensibly performed out of care for children labeled overweight or at-risk for overweight. However, as previously mentioned, despite claims of benevolence and ideological neutrality, a number of scholars point out that concerns about overweight and obesity have "more to do with preconceived moral and ideological beliefs about fatness than a sober assessment of existing evidence."

Throughout the paper, I consider whether educational policies, such as BMI testing, represent an authentic form of caring that is consistent with social democratic ideals. Theoretically, I draw on the works of Michel Foucault, as well as others, who have extended his insights to apply more specifically to school health issues. 9 Using this framework, I forward the argument that BMI testing is highly problematic and signals ways in which "new hierarchies of the body are being nurtured in... schools relating to size, shape and weight." <sup>10</sup> Additionally, I reveal the ways in which BMI testing contributes to the increasingly performative nature of school culture and curriculum whereby students' bodies have become yet "another form of valued currency in schools."11 The central aim of this paper is to explore BMI testing as it manifests in schools and increasingly comes to bear on students' lives and experiences within schools. Ultimately, I argue that BMI testing, premised on the goal of fixing students' bodies through greater surveillance, regulation and control, fundamentally lacks a commitment to authentically and holistically caring for students. By problematizing contemporary discourses surrounding overweight and obesity as well as the school's purported responsibility in light of this, the analysis hopes to inspire educators to "interrogate the assumptions and practices that inform the lived experiences of day-to-day schooling" and, where necessary, engage in counter discourses to undermine normative dimensions of policies and practices that are oppressive, exclusionary or altogether harmful. 12

### CALIFORNIA PHYSICAL FITNESS TEST PROGRAM

To guide my analysis, I examine the California Physical Fitness Test Program (CPFT). In 1995, California legislators passed Assembly Bill 265, a policy requiring schools to perform the CPFT on all students in fifth, seventh and ninth grades. The legislation was passed in response to concerns about rising rates of overweight and obesity among school-age children. The CPFT test evaluates students on the following six criteria: aerobic capacity, body fat (as measured by BMI), abdominal strength and endurance, trunk extensor

strength and flexibility, upper body strength and flexibility and overall flexibility. Results of all six components of the CPFT are compiled to determine a student's overall Body Composition Score. The legislation requires that personal results be sent home with each student. Individual scores are then aggregated to determine a school-wide Body Composition Score. A subsequent piece of legislation, Senate Bill 896, mandates schools to report their school-wide Body Composition Scores to the governor and legislature. The act further requires schools to publish results in their annual accountability report card. Additionally, California's State Department of Education posts school-wide and district-wide Body Composition Scores on its website. What this means is that in addition to categorizing and ranking schools via standardized reading, math and science scores, the public is now able to compare schools based on body shapes, sizes and degrees of physicality.

During the first few years of the policy's implementation, scores showed little to no improvement. Jack O'Connell, California's State Superintendent of Instruction lamented over these early disappointing results in the following press release:

Results are quite discouraging and show that the fitness level of students in California remains low... a major concern. Recent studies show there is compelling evidence that links physical fitness with academic achievement. Simply put, students who are physically fit appear to do better in schools.<sup>14</sup>

Until recently, the mandate did not impose consequences for students whose Body Composition Scores "failed" the assessment. This changed in January 2008 when California's State Department of Education concocted a plan to better "motivate" students. Consistent with educational policy motivational schemes at the federal level, California decided to impose sanctions on students who were not achieving up to the desired standard. The Department of Education decided that students in ninth grade who did not pass the CPFT would be penalized by having to take additional physical education classes until they obtained a passing CPFT score. According to Mike Triolo, a physical education teacher, the new state requirements have "added teeth" to the mandate. For the purposes of this analysis I focus exclusively on the BMI portion of the CPFT. I realize, however, that the other elements of the CPFT can be positioned as equally problematic.

#### THEORETICAL POINTS OF DEPARTURE

Foucault's analytic on how power works to construct and inform various subject positions provides a useful point of departure from which to examine the CPFT. His theoretical imagination offers insight into how discursive practices, such as those involved in health promotion, (re)shape or (re)make particular constitutions of the embodied self. As others have pointed

out, his insightful work "offers an 'archaeology' of knowledge, a method for understanding the ways in which self and society are constructed and rules which may operate independently of subjectivity." It is a theoretical orientation that lends itself toward unearthing the familiar and taken-forgranted assumptions related to power, ideology, authority and control. To the purposes of this inquiry I examine Foucault's writings on bio-power as these ideas intersect with notions of subjectivity formation and processes of normalization and, as a result, might position BMI testing as a potentially problematic display of power and coercion in the lives of young people.

Foucault linked ideas about subjectivity and subjectification very closely to his theories on contemporary governance. Subjectivity might be defined as the constellation of the inner self, as those parts of self that comprise one's ontological, ethical, and technical essence (or innateness). It is one's socially manufactured identity, informed by what individuals have learned about what is good, acceptable, knowable, and rational. According to Deborah Lupton, "language and discourse are central in the constitution of subjectivities, in a complex relationship with other sources such as sensual embodied experience and the unconscious." Subjectivity is not something we are born with; it is a nature that we acquire and actively produce through interactions, relationships, and behaviors. Subjectification refers to the ways in which subjectivity is acted upon to produce particular forms of an embodied self.

Foucault argued that every morality consists of two elements: codes of behavior and modes of subjectification. Codes of behavior comprise the unspoken and explicit rules that govern society, whereas modes of subjectification involve the ways that an individual "establish[es] his [sic] relation to the rule and recognizes himself as obliged to put it into practice." <sup>20</sup> For example, in his historical analysis of Christianity, Foucault examined how religion created the self through elaborate practices of modes of subjectification. He theorized that the process of subjectification first involves the formation of the ethical substance, or the ways in which individuals come to envision themselves as ethical beings and fashionable subjects bound by moral law. 21 The second mode of subjectification surrounds the ways in which individuals are encouraged to identify their moral obligations. 22 "This way might be formulated, for example, by a divine law, natural law, cosmological order or rational rule." For example, with regard to sexuality, religion helped form an awareness regarding those ethical substances that were to be valued or admonished. Foucault claimed that the process of subjectification could only work when individuals willingly subjected themselves to the identified moral obligation (via God or religious leaders, for example).24 The third mode involves techniques of self, or those actions individuals take to transform themselves into ethical beings.<sup>25</sup>

Foucault claimed that subjectification leads to an "objectification of moral obligations into codes or discourse of ethics, such as the discourses of

sexuality...these discourses of subjectivity form particular identities and roles" which, in turn, become the focus of strategies of normalization. Thus, subjection produces a moral order which shapes and guides various practices of the self. It is this final mode that surrounds an individual's ultimate ethical aspiration, the mode that governs "the kind of being to which we aspire when we behave in a moral way." According to Hanna Simola and her colleagues, "it is the moral teleology, a mode of ethical fulfillment." With regard to discourses of health/weight/fitness, this typically surrounds the ideology of self-fulfillment through self-knowledge; it is also a moral teleology used to justify a range of preventative health policies and measures. <sup>29</sup>

In the case of subjectification and normalization via school practices and pedagogies, it is important to point out that "all pedagogical relations are power relations. There is no instruction without regulation, no pedagogy divorced from control." This does not, however, mean to suggest that relations of power are inherently harmful or to be necessarily voided. Rather, as Foucault pointed out:

We are therefore not attempting to find out what is true or false, found or unfounded, real or illusory, scientific or ideological, legitimate or abusive. What we are trying to find out is what are the links, what are the connections that can be identified between mechanisms of coercion and elements of knowledge, what is the interplay of relay and support developed between them, such that in a given element of knowledge takes on the effects of power in a given system where it is allocated to a true, probably, uncertain or false element, such that a procedure of coercion acquires the very form and justification of a rational, calculated, technically efficient element.<sup>31</sup>

Following the spirit of inquiry that Foucault describes, in the next section, I examine BMI testing for the ways in which "links" are made; the processes and forms of knowledge that help position this activity as an acceptable and justifiable one for public schools. I then reflect on the ways in which BMI testing, as a form of pedagogy, can be positioned as a problematic extension of the schools' authority.

# BMI TESTING: A NATURAL EXTENSION OF CONTEMPORARY SCHOOLING

BMI testing in schools as a method to counter childhood overweight and obesity is largely supported by politicians, public health officials, policy makers and school leaders. A number of factors help position BMI testing as an appropriate pedagogical tool. First, BMI testing is often shrouded in claims of biomedical certainty. For example, BMI testing explicitly suggests that it is indeed possible to determine one's overall health status from a single numerical figure. As such, the diagnosis comes to represent a neutral biomedical statistic that is imbued as the infallible voice of science and medicine.<sup>32</sup> Rarely is the

public provided a more complex understanding of various health states or shown evidence that BMI testing routinely overestimates fatness in muscular and athletic individuals and is not a good measurement tool for children and adolescents whose bodies are still developing and growing.<sup>33</sup>

Another reason BMI testing at schools seemingly "makes sense" is that schools are increasingly implicated in social policy documents to lead the so-called "war" against overweight and obesity. Because all children are required to attend schools, schools are positioned as ideal locations to influence the health status of children. Moreover, schools that make issues of health a leading priority are often publicly congratulated as "champions for change." In this environment, BMI testing becomes a contemporary avenue for schools to display their commitment to health and perform their civic duty to society. Finally, BMI testing is consistent with the entire ideological framework of schooling, for the same "punishment as motivation" type assumptions that underwrite the policy pervades the very structure of contemporary schooling. Naturally then, BMI testing is "given added impetus and importance" as it reflects and feeds off a "desire for quantification and control."

### BMI TESTING AND BIO-POWER

As schools are increasingly asked to intervene on issues relating to health and health promotion, they have become immanently conducive to the exercise of bio-power. According to Denise Gastaldo, contemporary health policies have emerged as key interface between government and the population. She writes:

What is healthy is what the health policy says is healthy. In other words, health education ... is intended to reinforce health patterns conceived by the government for the population. Therefore, health education policy can be understood as a strategy of governmentality through biopolitics. When health education aims to produce changes in your behavior, it becomes mainly normative. Thus 'healthy' behavior is presented as the norm, and all other behaviors become deviant <sup>36</sup>

On one hand, and consistent with Foucault's concept of anatomopolitics, young bodies represent existent beings that require, for their own sake, to be monitored and treated in states of both health and potential ill health. In the case of BMI testing, students are provided individualized assessment about their bodily measurements and methods of intervention if their bodies fall outside of the acceptable range. On the other hand, and in a bio-political way, the student population of California en masse represents an entire demographic segment whose alleged ill-health will increase medical expenditures and threaten the financial wellbeing of the state.

Certainly schools have long been sites for experts to invade the embodied lives of children in the name of health and wellness for the purpose of fashioning a particular kind of student/citizenry (consider, for example, school-sponsored immunizations, uniform policies, or school lunch programs).<sup>37</sup> In some ways, these initiatives do not represent a particularly new frontier. What BMI testing does, however, is expand previous modes of governance and surrounds a deeply personal venue, the corporeal body, upon which schools are required to act directly upon. Students are not only encouraged to embrace the school's version of the ideal body form, size and degree of physicality, but the practice of measuring and labeling students reveals to students that their own physicality and bodily inscriptions are *public* knowledge apt for collection, scrutiny, research, and critique.

BMI testing in schools also represents a corporeal extension of national educational policy movements that utilize public embarrassment as a method to instill compliance. In light of Foucault, the project can also be positioned as a technique of governance as well as a manifestation of national (and global) shifts to fabricate private domains into public concerns. The trend can be thus seen as an example of "new ways of managing and disciplining children's bodies" in an era when children are, according to Henry Giroux, increasingly positioned as "a national burden, more despised and feared than cherished and protected."

In what ways do students in California learn about what is good, acceptable, knowable and rational? In other words, in what ways might BMI testing influence students' subjectivities? I argue that BMI testing is directly involved in the formation of various subjectivities and subject positions as it centrally concerns the ways in which students learn about their own bodily inscriptions. By constructing the overweight student as necessarily unhealthy and in need of intervention, the school also creates the student categorized as "normal" as necessarily healthy. Students are provided an explicit reference: this is the norm and this is where you fall in relation to what is considered normal. Because students can visually see their congruence or divergence from what the school constitutes as a healthy and acceptable body, they are able to see just how normal/virtuous or abnormal/deviant their bodies are. For students, abnormality, in this case defined as overweight, underweight, or atrisk for overweight, is no longer an abstraction, but becomes a reference or relation to oneself. The officialness of the label (overweight, at-risk for overweight) further substantiates the definitiveness and legitimacy of the diagnosis. That the label has come from a school leader imbues the categorization with an arguable degree of credibility.

Consider another problematic issue with California's policy. Students who do not pass the CPFT are penalized by having to continue to take high school physical education classes until they achieve a satisfactory score. On one hand, this policy holds the very real possibility of stigmatizing students and potentially subjecting them to various forms of discrimination. High school physical education courses may well be branded as only necessary or

applicable for the unfit, uncoordinated or unhealthy student population. If this school-wide labeling is not enough to motivate students, all school and district aggregate Body Composition Scores are posted online. This helps the public further differentiate between "successful" and "unsuccessful" schools. Importantly, this kind of public disgrace and humiliation functions as an important regulatory element of bio-power, in this case it is levied "via a process of normalization in which young people are socially rewarded for embodying the correct behavior and following the moral duty to 'shape the body." <sup>40</sup> As Foucault reminds,

The power of normalization imposes homogeneity; but it individualizes by making it possible to measure gaps, to determine levels, to fix specialties and to render the differences useful by fitting them one to another. 41

In the case of BMI testing, failing students are not only encouraged to assume a normal/healthy body shape, but students failing to conform to this norm becomes a threat to their own health and also a threat to the reputation and success of the entire school and district.

On the other hand, the policy holds implications for all students' understandings about the role and purposes of physical education. By situating physical education as a punishment, school leaders explicitly suggest to students that physical fitness is not intrinsically enjoyable or pleasurable but rather is only something that deviant bodies are forced to assume. In many ways, this aspect of the CPFT contradicts what is arguably the central aim of the legislation: to encourage students to engage in fitness and healthy lifestyles.

### BMI TESTING AND THE SUBVERSION OF CARE

At the heart of my argument I contend that the kind of corporeal regulation and control that the BMI testing inspires subverts the development of caring relations within schools. BMI testing ensures that relationships based on authenticity, individuality and trust are, "replaced by judgmental relationships, [where] persons are valued for their productivity and performance alone." At the same time, these interventions do nothing to change the socio-economic structures or social conditions in which children exist, some of the primary determinants of health and well being. 43 For example, nowhere does the CPFT address socio-economic or structural dimensions of health, issues such as the inequitable distribution of healthy foods in urban and rural neighborhoods, lack of access to health care, the negative health implications of living in poverty or the differential access to safe and clean spaces to engage in physical activity. However, addressing these complex issues would certainly not offer a quick and easy solution that BMI testing seemingly does. Further, recall California's State Superintendent's comment: "Simply put, students who are physically fit appear to do better in schools." O'Donnell's very candid comment suggests that improving the health status of children is not the primary goal of the policy after all. Rather, what is more important is increasing student achievement (presumably, in standardized ways).

## POSSIBILITIES THROUGH RESISTANCE, ACTION AND INTELLECTUAL COURAGE

For some of the reasons already described, rarely, be it in the news media or within educational policy, do discourses regarding youth overweight and obesity foster critical inquiry into the legitimacy of the proposed health crisis, the curricular and/or pedagogical relevance of the interventions, the school's legitimate authority to carry out such acts, the school's efficacy in performing interventions or, perhaps most importantly, the ethical ramifications of these initiatives. This happens primarily because health policies are justified on the ways in which providing care for students have been so dominantly inscribed. In many ways this paper is less about "reconsidering" the neutrality of care as it is about suggesting that care is never neutral. In some instances it might be warranted and, as such, represent a justifiable response to human suffering. In the case of BMI testing, however, where individual responses have no place and serve to thwart development of authentic relations between teachers and students, students and administrators, as well as among groups of students, the intervention can be justifiably positioned as uncaring.

In "Nietzsche, Genealogy, History," Foucault locates the body as text. 45 He argues that the body as a text is entangled in discourses and bound and manufactured by systems of power and control. 46 Applying this concept to the field of health education, Foucault offers a lens whereby educators might begin to examine how discourses and practices enacted in schools in the name of health serve as important (and perhaps harmful) representations for students to experience, talk, think about and reside in their bodies. 47 Certainly everyone is discursively inscribed by ideologies of health that pervasively circulate within society. Through various venues (family, popular culture, news media) students learn what notions of physicality are celebrated and which ones are disparaged. For students at schools that mandate BMI testing inscriptions become tangible labels that serve as "signs of both discipline and punishment that cannot be erased or effaced." 48

Educators, I believe, are ethically compelled to critically examine the structure and content of school curriculum for potentially alienating and oppressive practices and, if found, engage in discourses and actions to denounce, subvert or resist these. However, as Foucault suggests:

Power is not an evil... Let us...take something that has been the object of criticism, often justified: the pedagogical institution. I don't see where evil is in the practice of someone who, in a given name of truth, knowing more than another, tells him [sic] what he must do, teaches him, transmits knowledge to him, communicates skills to him.

The problem is rather to know how you are to avoid in these practices – where power cannot play and where it is not an evil in itself – the effects of domination which make a child subject to the arbitrary and useless authority of a teacher, or put a student under the power of an abusively authoritarian professor.<sup>49</sup>

In light of this gentle cautioning, it becomes increasingly necessary for educators to develop, or provide opportunities to develop, the intellectual, ethical and cultural resources that will enable them make such determinations. It might be then, as Giroux recommends, for schools to work to foster an environment that encourages its members to consider, "what is it that society [or the school] has made of me that I no longer want to be?" Questions such as this might help students and teachers alike to acknowledge that educational institutions are involved in constructing and affirming certain identities, subjectivities and knowledges over others and perhaps more importantly, begin to assess whether the dominantly celebrated constructions and affirmations are valuable, fair, equitable and just.

In light of issues related to health policies and practices, educators might also discuss with students how perceptions of normal/healthy and abnormal/unhealthy are defined and circulated within society. Certainly norms related to health and/or overweight are continually shifting, divergent, socially constructed and historically bound entities. For example, "not so long ago in Western societies, animal fat was considered 'good for you' and even as a luxury." Fatness was an object of beauty; a voluminous body was a mark of prosperity and health. Conversations such as this might assist students to deconstruct contemporary messages and reposition them as historical bound and socially constructed.

As previously mentioned, mandates for school-based BMI testing are increasingly embraced by many members of the school community. This is largely a reflection of the ways in which issues surrounding the causes, consequences or problem of overweight have been socio-politically manufactured, which constructs the problem of overweight as a definitive and cataclysmic crisis and, at the same time, implicates schools as important venues for remediation. By situating the issue in this way, school-based interventions promising to solve the issue are positioned as ideologically innocent and justified as necessary and socially responsible.

Given the powerful regimes of truth at work to further institutionalize and legitimate BMI testing as appropriate and beneficial, educators might also work to create critical counter discourses and actions to resist these problematic policies. As Evans and Rich point out, it is no longer "enough to criticize, explain or understand [these policies]. We have to engage with the paradox of wanting to utterly reject the performative values in health and education that are driving" these kinds of initiatives. <sup>52</sup> At the very least, BMI testing represents an opportunity for educators to engage students in conversations

about socio-political environment in which health-discourses are constructed and manufactured, where these policies find traction and popular support. Rather than allowing school health initiatives to become an aspect of the school's "machinery of surveillance," ideologies and initiatives might instead be used as educative moments to encourage the entire school community (teachers, staff, students and their families) to critically examine norms and associated moral imperatives connected with health, body weight and nutrition.<sup>53</sup>

Additionally, instead of willingly accepting biomedical discourses as fact, educators could encourage students to examine the assumptions and limitations of *neutral* scientific research. This method of inquiry might involve posing critical questions about "how science presently operates within existing systems of power to 'normalize' certain patterns of action and systems of thought."<sup>54</sup> Related to this, educators could also assist students to "recognize that the dominant school culture is not neutral and does not generally serve their needs. At the same time [educators] need to ask how it is that the dominant culture functions to make them, as students, feel powerless." To be sure, engaging in these kinds of discourses and pedagogical struggles will require spirit, effort, will and perhaps most importantly, intellectual courage.

#### Notes

<sup>&</sup>lt;sup>1</sup> John Evans and Brian Davies, "Pedagogy, Symbolic Control, Identity and Health," in *Body Knowledge and Control: Studies in the Sociology of Physical Education and Health*, ed. John Evans, Brian Davies and Jan Wright (London: Routledge, 2004): 3-31, 11.

<sup>&</sup>lt;sup>2</sup> Michael Gard and Jan Wright, *The Obesity Epidemic: Science, Morality and Ideology.* (London: Routlege, 2005).

<sup>&</sup>lt;sup>3</sup> For example see, Gard and Wright, *The Obesity Epidemic*, 3; Abigail Saguy and Rene Almeling, "Fat in the Fire? Science, the News Media, and the 'Obesity Epidemic,' *Sociological Forum* 23, no.1 (2008). 53-83.

<sup>&</sup>lt;sup>4</sup> Kim Cobb, "It's Gut-Check Time for Body Mass Index Testing: Texas Lawmakers Keep Close Eye on Arkansas Schools' Disputed Formula," *The Houston Chronicle*, February 5, 2005, 1 (A).

<sup>&</sup>lt;sup>5</sup> Michael Hill, "Kids Risk an "F" in BMI Under Legislative Proposal," *The Associated Press and Local Wire*, January 27, 2005. LexisNexis, http://web.lexisnexis.com/universe (accessed July 15, 2007).

<sup>6</sup> From a discrete bio-medical standpoint, overweight and obesity are defined as having an excess of body fat mass. Fat mass, however, is tremendously difficult for lay practitioners, such as school health personnel, to measure. An accurate reading requires both a high degree of skill on behalf of the practitioner and a high level of compliance on behalf of the individual being measured. Because of this, most lay practitioners rely on body mass index (BMI, kg/m²) as a "quick and dirty" index of measurement for children.

<sup>7</sup>Oregon House Bill 2329, as cited in Jeanine C. Cogan, Joslyn P. Smith and Margo D. Maine, The Risks of a Quick Fix: A Case Against Mandatory Body Mass Index Reporting Laws," *Eating Disorders* 16 (2008): 2-13, 3.

<sup>8</sup> Gard and Wright, *The Obesity Epidemic*, 3. See also, John Evans, Bethan Evans, and Emma Rich, "The Only Problem Is, Children Will Like Their Chips: Education and the Discursive Production of Ill-Health," *Pedagogy, Culture and Society* 11, no. 2 (2003): 215-240.

<sup>9</sup> See for example, Michel Foucault, "The Subject and Power," in *The Essential Foucault: Selections from the Essential Works of Foucault*, 1954-1984, ed. Paul Rabinow and Nikolas Rose (New York: The New Press, 2003); Michel Foucault, *History of Sexuality, Volume 2: The Use of Pleasure* (Random House, New York, 1985); Jan Wright and Rebecca Dean, "A Balancing Act: Problematising Prescriptions about Food and Weight in School Health Texts," *Journal of Didactics and Educational Policy 16*, no.2 (2007): 75-94.; John Evans, Emma Rich and Brian Davies, "The Emperor's New Clothes: Fat, Thin, and Overweight. The Social Fabrication of Risk and Ill Health," *Journal of Teaching in Physical Education 23* (2004): 372-391; Peter Kelly, "The Dangerousness of Youth-at Risk: The Possibilities of Surveillance and Intervention in Uncertain Times," *Journal of Adolescence 23* (2000): 463-476; Kelly, D. Brownwell, "Personal Responsibility and Control Over Our Bodies: When Expectation Exceeds Reality," *Health Psychology 10* (1991): 303 – 310.

<sup>&</sup>lt;sup>10</sup> Evans and Davies "Pedagogy, Symbolic Control, Identity and Health," 8.

<sup>&</sup>lt;sup>11</sup>John Evans, Emma Rich, Brian Davies and Rachel Allwood, *Education, Disordered Eating and Obesity Discourse: Fat Fabrication.* (London: Routlege, 2008), 117.

<sup>&</sup>lt;sup>12</sup> Henry A. Giroux, *Teachers as Intellectuals: Toward a Pedagogy of Learning*. (Granby, MA: Bergin and Garvey Publishers, 1988), 7.

<sup>&</sup>lt;sup>13</sup> See California Department of Education, "Dataquest" California Department of Education http://data1.cde.ca.gov/dataquest/

- <sup>14</sup> California Department of Education, "State State Schools Chief O'Connell Announces 2003
- Physical Fitness Results for California Students," California Department of Education http://www.cde.ca.gov/nr/ne/yr03/yr03rel74.asp (accessed July 15, 2008).
- <sup>15</sup> Stephanie K. Parry, "High School Students Face State Mandated Fitness Testing," Sign-on San Diego http://www.signonsandiego.com/news/education/20080412-9999-lz1mc12fitnes.html (Accessed October 23, 2008).
- John Evans and Brian Davies, "Sociology and Health in a Risk Society," in *Body Knowledge and Control: Studies in the Sociology of Physical Education and Health*, ed. John Evans, Brian Davies and Jan Wright (London: Routledge, 2004), 34-51, 45.
- <sup>17</sup> Ibid, 43.
- <sup>18</sup> Nicholas Rose, *Governing the Soul: The Shaping of the Private Self* (London: Free Association Books, 1999), xii; See also Deborah Lupton, *The Imperative of Health: Public Health and the Regulated Body,* (Thousand Oaks, CA: Sage), 6-7.
- <sup>19</sup> Lupton, *The Imperative of Health*, 7.
- <sup>20</sup> Foucault, *History of Sexuality*, Vol. 2, 27.
- <sup>21</sup> Ibid., 26-27.
- <sup>22</sup> Michel Foucault, "On the Genealogy of Ethics: An Overview of Work in Progress," in *Michel Foucault: Beyond Structuralism, and Hermeneutics* ed. Paul Rabinow and Hubert Dreyfus (Chicago: University of Chicago Press, 1983), 209.
- <sup>23</sup> Hannu Simola, Sakari Heikkinen, and Jussi Silvonen. "A Catalogue of Possibilities: Foucaultian History of Truth and Educational Research," In *Foucault's Challenge: Discourse, Knowledge, and Power in Education*, ed. Thomas S. Popkewitz and Marie Brennan (New York: Teachers College Press), 64-90, 67.
- <sup>24</sup> Foucault, *History of Sexuality*, Vol. 2.
- <sup>25</sup> Foucault, "Genealogy of Ethics," 239.

- <sup>26</sup> Bryon S. Turner, "From Governmentality to Risk: Some Reflections on Foucault's Contribution to Medical Sociology," in *Foucault, Health and Medicine*, ed. Alan Peterson and Robin Bunton (New York: Routledge, 1997), ix-xxi, xii.
- <sup>27</sup> Foucault, "Genealogy of Ethics," 239.
- <sup>28</sup> Simola, Heikkinen, and Silvonen, "A Catalogue of Possibilities: Foucaultian History of Truth and Educational research," 67.
- <sup>29</sup> Lupton, *The Imperative of Health*.
- <sup>30</sup> Evans et al., Education, Disordered Eating and Obesity Discourse, 130.
- Michel Foucault, "What is Critique?" in *The Essential Foucault: Selections from the Essential Works of Foucault, 1954-1984*, ed. Paul Rabinow and Nikolas Rose (New York: The New Press, 2003), 274.
- <sup>32</sup> Gard and Wright, *The Obesity Epidemic*.
- <sup>33</sup> Evans, Evans, and Rich, "The Only Problem Is, Children Will Like Their Chips," 222. See also Gard and Wright, *The Obesity Epidemic;* Dru Marshal, Clark Hazlett, Donald Spady, Patricia Conger, and Art Quinney, "Validation of Convenient Indicators of Obesity," *Human Biology* 63 (1991): 137- 155; Stephen Daniels, Philip Khoury, and John Morrison, "The Utility of Body Mass Index as a Measure of Body Fatness in Children and Adolescents: Differences by Race and Gender," *Pediatrics* 99, no. 6. (1997): 804-807
- <sup>34</sup> Food and Nutrition Service, USDA and CDC, U.S. Department of Health and Human Services, *Making It Happen!*, http://www.fns.usda.gov/TN/Resources/makingithappen.html (accessed September 3, 2008).
- <sup>35</sup> Evans et al., Education, Disordered Eating and Obesity Discourse, 40.
- <sup>36</sup> Gastaldo, "Is Health Education Good For You?" 119.
- <sup>37</sup> See Kirk. Schooling Bodies.
- <sup>38</sup> Michael Gard and David Kirk, "Obesity Discourses and the Science of Disciplinary Technology," *Utbildning & Demokrati* 16, no.2 (2007): 17–36, 18.

- <sup>39</sup> Henry A. Giroux, "The Terror of Neoliberalism: Rethinking the Significance of Cultural Politics," *College Literature* 32, no.1 (2005): 1-19, 7.
- <sup>40</sup> John Evans, Emma Rich, Rachel Allwood and Brian Davies, "Body Pedagogies, P/policy, health and Gender," *British Educational Research Journal* 34, no.3, (2008): 387-402, 396.
- <sup>41</sup> Foucault, Discipline and Punish, 184.
- <sup>42</sup> Ibid, 390.
- <sup>43</sup> Ibid; See also John Evans and Brian Davies, "The Poverty Theory: Class Configurations in the Discourse of Physical Education and Health (PEH)," *Physical Education and Sport Pedagogy* 13, no.2, (2008): 199-213.
- <sup>44</sup> Evans et al., Education, Disordered Eating and Obesity Discourse,
- <sup>45</sup> Michel Foucault, "Nietzsche, Genealogy, History," in *The Foucault Reader*, ed. Paul Rabinow (New York: Pantheon Books, 1984), 83.
- <sup>46</sup> Vivian Adair, "Branded with Infamy: Inscriptions of Poverty and Class in the United States," *Signs* 27, no. 2 (2002): 451-457, 453.
- <sup>47</sup> Lupton, *The Imperative of Health*, 6.
- <sup>48</sup> Adair, "Branded with Infamy," 454.
- <sup>49</sup> Michel Foucault, "The Ethic of Care for the Self as a Practice of Freedom," in *The Final Foucault*, ed. J. Bernauer and D. Rasmussen (Cambridge, MA: MIT Press, 1988) as cited in Jennifer M. Gore, "Disciplining Bodies: On the Continuity of Power Relations in Pedagogy," in *Foucault's Challenge: Discourse, Knowledge, and Power in Education*, ed. Thomas S. Popkewitz and Marie Brennan (New York: Teachers College Press, 1998), 236.

<sup>&</sup>lt;sup>50</sup> Giroux, Teachers as Intellectuals, xxxv.

<sup>&</sup>lt;sup>51</sup> Peterson and Lupton, *The New Public Health*, 51.

<sup>&</sup>lt;sup>52</sup> Evans, Rich and Davies, "Class and Cultural Functions of Obesity Discourse."

<sup>&</sup>lt;sup>53</sup> Gard and Wright, *The Obesity Epidemic*, 546.

<sup>54</sup> Ibid.