Korbla P. Puplampu
Grant MacEwan College, Edmonton

Knowledge, Power, and Social Policy:
John M. MacEachran and Alberta's 1928 Sexual Sterilization Act

This article examines how academic knowledge and power have shaped the discourse on human classification and how political authorities use academic knowledge producers to legitimize public policy. Specifically, the article draws on the role of John M. MacEachran, a former academic at the University of Alberta, in the implementation of the Alberta 1928 Sexual Sterilization Act. The article argues that political authorities use academics and their knowledge in social policy when there is consistency with the interests of broader sociopolitical forces. Drawing on critical pedagogy, the selective use of academic knowledge-producers and the implications are discussed with reference to the relationship between educators and learners and university-society relations in general.

Cet article traite, d'une part, de l'influence des connaissances et du pouvoir académiques sur le discours relatif à la classification des êtres humains et, d'autre part, de l'emploi par les autorités politiques des producteurs de connaissances académiques pour légitimer les politiques publiques. Plus précisément, l'article porte sur le rôle qu'a joué de John M. MacEachran, un ancien professeur à la University of Alberta, dans la mise en oeuvre de la loi albertaine de 1928 sur la stérilisation sexuelle. L'auteur maintient que les autorités politiques ont recours aux connaissances des professeurs d'université relatives aux politiques sociales quand il y a cohérence avec les intérêts des forces sociopolitiques plus générales. Puisant dans la pédagogie critique, l'auteur discute de l'emploi sélectif des connaissances académiques et de ses conséquences dans le contexte du rapport entre les éducateurs et les apprenants, et celui entre l'université et la société en général.

Introduction

As institutions of higher learning, universities play an important role in societal development. They play a major role in providing the human and intellectual capacity necessary to ensure that the knowledge base of a society is not only sustained, but also used to resolve societal concerns. Specifically, the teaching and research services of universities and their overall contribution to producing knowledge for societal development have been recognized and stressed in various settings (Kassam & Tettey, 2003; UNESCO, 1996; World Bank, 2002a). Indeed, academic knowledge has been privileged in social policy because society confers on academics a certain level of credibility and legitimacy.

Korbla Puplampu is in the Department of Sociology. His research interests include the politics of knowledge production and propagation, identity politics in multicultural societies, and the global restructuring of higher education and agriculture. Recent book publications include *The African Diaspora in Canada: Negotiating Identity and Belonging* (2005) co-edited with Wisdom J. Tettey, and recent journal articles that have appeared in *Teaching in Higher Education* and *Perspectives on Global Development and Technology*.

However, academic institutions and knowledge (university), and society relations in general, have sometimes been locked in a contradictory relationship. On one hand, academic knowledge is pivotal in undermining orthodoxies of the day. On the other hand, such knowledge, either intentionally or unintentionally, could also establish orthodoxies. An understanding of these seemingly contradictory positions lies in the historical context in which universities in Canada, the focus of this study, emerged (Adams, 1968; Axelrod & Reid, 1989; Gregor & Wilson, 1979; Jones, 1998a). A historical review of the origins of universities in Canada, as in other jurisdictions, demonstrates a range of social and political influences: religious institutions, the state machinery, and other powerful social groups. Notwithstanding the range of forces, one concern at the center of university-society relations is the legitimacy of academic knowledge and the use of that knowledge in social policy.

This study examines the intellectual and political dimensions of the Government of Alberta's 1928 *Sexual Sterilization Act* (SSA). The SSA has been the subject of several studies; specifically, how the problem of feeble-mindedness was constructed to warrant sterilization as a policy option, the overrepresentation of some ethnic groups among those sterilized, the human rights dimensions, and the larger sociopolitical context of the policy (Chapman, 1977; Christian, 1973; Grekul, 2002; Grekul, Krahn, & Odynak, 2004; McLaren, 1990). One aspect of the policy involved the use of academic expertise, exemplified by John M. MacEachran, a former professor of the University of Alberta, Edmonton (Wahlsten, 1997, 1998, 1999a, 1999b).

This study examines the role of John M. MacEachran, and by extension the university, in the implementation of the sterilization policy. Drawing from critical pedagogy, the study situates the sterilization policy in the broader context of the discourse on human classification. I argue that academics and their knowledge when consistent with wider sociopolitical interests are more likely to be inscribed as legitimate and used in the policy process. The legitimization process, therefore, has implications for the nature of the relationship between educators and learners and university-society relations at large with respect to knowledge production.

To substantiate the argument, in the first section I offer brief remarks on critical pedagogy and its implications for the theory of knowledge and power. I also show the role of academics in knowledge production and use with reference to the discourse on human classification. In a further section I outline the role of two major actors—MacEachran and the University of Alberta—in the discourse on human classification. I also analyze the role of the two actors in Alberta's sterilization policy. In the final section I address the implications of the role of MacEachran and the University for an analysis of the contemporary relationship between educators and learners and attempts to build a better relationship between universities and the larger society. A summary and a conclusion follow.

Universities, Knowledge, Power, and Critical Pedagogy: A Brief Overview
The basic issues in knowledge are the ideas, beliefs, and value systems and how these interact with political, economic, and social conditions (Mannheim, 1938, 1952). The sociological analysis of knowledge involves the "systematic study of knowledge, ideas or intellectual phenomena in general" (Ritzer, 2000,

p. 24). The university's role in knowledge production and the role of academic knowledge in social policy are sustained by several sometimes unstated and normative assumptions. "The university," Zinser and Lewis (1988) contend, "preserves and transmits the existing body of human knowledge. It provides a forum for critical analysis of ideas. And it expands the store of human understanding in many forms" (p. 217). Slaughter and Slaughter (1988) also argue that universities "embody a broad, diverse, and even disparate sets of fields, disciplines, and courses of study that bring together a coterie of people, resources, facilities, and ideas. This fusion of unique capabilities for thought and output give universities a singular position in our society" (p. 209).

Implicit in the conceptualization are two issues: the idea of universities as autonomous institutions engaged in knowledge production and propagation; and the idea that universities require the free and open flow of information and are engaged in disinterested research (knowledge production and propagation). Academic knowledge is, therefore, perceived as neutral because academics are dispassionate or disinterested producers of knowledge. As knowledge producers, it is assumed that academics have no interests or power; and their work is perceived as isolated from wider sociopolitical forces, hence more appropriate in the policymaking or implementation process. In essence, universities and their academic laborers are islands unto themselves producing and spreading objective knowledge.

The above assumptions have been the focus of critique by critical pedagogues. Critical pedagogy seeks to examine the dynamics of the relationship between theory and action, situating research in the intersections of power and other forms of domination, oppression, and resistance (Freire, 1985, 1993; Giroux & McLaren, 1989; McLaren, 1998). At the heart of critical pedagogy is the irrevocable commitment "to the side of the oppressed … [along with the belief that] liberation is an authentic goal, and a radically different world can be brought into being" (McLaren, p. 164). There is, therefore, recognition of the political and historical context of knowledge, its relationship with "power, subordination, and struggle within a progressive vision" (Ghosh & Abdi, 2004, p. 22). Critical pedagogy addresses how "to overcome the gap between understanding educational reproduction and taking action to provide social and educational transformation" (Wotherspoon, 1998, p. 37).

Thus knowledge to critical pedagogues is not neutral (Foucault, 1980; Giroux & Giroux, 2004; Giroux & McLaren, 1989; Grace, 1997; McLaren, 1998). The university and its academic laborers are not disinterested knowledge producers; they do have power, and their work is situated in a wider sociopolitical context. For example, there is the recognition that the peer review process that is assumed to be the mechanism that guards against error or bias in scientific knowledge is not without problems. Peer review cannot prevent error if researchers generally come from a narrower demography of the society and when academic knowledge is applied beyond the realm of the academy.

In view of the power of knowledge and of the producers, the question is how university-society interests are balanced, and the implications for the legitimacy of academic knowledge, especially when the work of academic laborers or knowledge informs public policy. Critical pedagogy stresses that knowledge systems are bound with power and other elements in a specific

social context. Hence it is important to make distinctions between what is considered knowledge in a society and what is not. An understanding of what constitutes knowledge, and what does not, ultimately involves questions of power. This is the framework for the intricate relationship between knowledge and power.

Foucault (1980, 1983), perhaps more than anyone else, offers a nuanced analysis of the relationship between power and knowledge. Interested in the mechanics of power and how it is exercised, Foucault (1983) argues that power designates a set of relationships between social actors, and "what defines a relationship of power is that it is a mode or action which does not act directly and immediately on others. Instead, it acts upon their actions" (p. 220). Foucault shows how the subject is drawn into the power nexus through techniques like surveillance, which aim at creating a disciplined individual. By using surveillance to discipline the individual, there is no need to rely on physical force or violence, in the Weberian sense, in the exercise of power. The disciplinary dimension of power is a typical feature of social institutions, which are organized around forms of knowledge, for example, schools and hospitals. In such institutions, and in this case universities, the experts or knowledge producers have the power to define what is normal or abnormal and are the ultimate proponents of "truth."

Foucault (1980) defines knowledge to include political, economic, and social conditions. This is the background in which knowledge or statements are regarded as legitimate or illegitimate. Power and knowledge are connected because "the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power" (p. 52). Power relations can only operate with the production of knowledge and with certain bodies of knowledge being inscribed as legitimate and others as illegitimate. Similarly, the exercise of power also creates new objects of knowledge. Consequently, the prevailing knowledge in society influences how power is exercised and vice versa. Foucault's multidimensional, complex, and dynamic analysis of power and knowledge has significance for an analysis of the university's role in the production and propagation of knowledge and the nature of the relationship between educators and learners. Critical pedagogy, specifically how it theorizes social power and situates categories of race and ethnicity in power and political relations, has relevance for understanding the nature of knowledge, the discourse on human classification, and social policy (Giroux & McLaren, 1989).

Knowledge, Power, the Discourse on Human Classification, and Public Policy
An example of how academic knowledge has informed public policy can best be seen with respect to knowledge systems on human classification. The discourse on human classification and the subsequent implications for power and prestige has been between the theological and scientific literatures. The former literature offers the origins of humankind in terms of creation by a supernatural being and draws its argument on human beings or types extensively from religious texts; for example, the Bible, the holy book of the Christian faith. The latter literature, the focus of this study, draws from several sources and is by no means unanimous in its conclusion. However, the work of the English philosopher Charles Darwin, *The Origin of Species and the Descent of Man*,

published in 1859, is often perceived as a significant breakthrough in the scientific understanding of human types and origins.

Drawing on earlier studies by another English philosopher, Herbert Spencer, Darwin emphasized evolution rather than creation of the human species. "Darwin and his followers," as Cashmore and Troyna (1990) correctly maintain, "were confident of a human progress towards an ever-improving series of races [albeit in a differential form and manner]" (p. 35). Race is a biological or physical concept, and some formulations of the concept have highlighted physical attributes like head size, facial morphology and hair color. However, skin color has been the most consistently used criterion, and this has given rise to the crude formulations of "white" and "non-white" human types. The former serves as the "gold standard," and the latter includes all other colors. The typology has given rise to the equally unsophisticated and erroneous belief of equating "whites" to a "superior" status and "non-whites" to an "inferior" one (Fleras & Elliott, 2003).

As Thomas and Thomas (1932) argue, "If men [sic] define situations as real, they are real in their consequences" (p. 572). The social significance of race and the physical features often used to delimit it are creations of human beings, and the processes involve never-ending political and social struggles over meanings and self-fulfilling prophecies in the social construction of reality. The social construction of race and human classification took on a life of its own following the work of Francis Galton, Charles Darwin's cousin. Galton's work on human heredity led him in 1883 to coin the term *eugenics*, which is selective breeding to improve humankind. In applying the principles of eugenics to human types, the aim was to improve the human race. As Michael Rose contends (Melange, 1999), "Darwin and Galton accepted the concepts of superior and inferior races" (p. B11). In classifying some races as superior and others as inferior, the proponents of eugenics already identified the end-state of humankind. The task was to devise scientifically the means to attain that objective.

The scientific underpinnings of eugenics stem from an erroneous reading of Mendel's laws in the 1900s (Wahlsten, 1997). The erroneous reading was along the lines of "like beget likes." Although instances of

> Mendelian inheritance in fruit flies and laboratory mice began to accumulate rapidly … few good cases could be made for humans in the 1920s.… [Nevertheless] some scientists presumed that similar principles must be at work in the human brain to cause a wide variety of mental disorders and social deviations. Thus [for example] feeble mindedness … were attributed to Mendelian genes on the basis of flimsy evidence and zealous proponents for eugenics used Mendelism as a propaganda tool to sway public opinion. (p. 187)

The significance of the above discussion is to emphasize how knowledge produced by academics or intellectuals is given so much credibility, taken as legitimate, and perceived as objective.

Academic labor, it must be stressed, mirrors the ideological and methodological dispositions of the academic laborer irrespective of the routine statement, especially in the social sciences, that the studies conform to the canons of objective research. Fleras and Elliott (2003) have, therefore, characterized many social science studies purporting to have established the relationship between

race and intelligence, for example, as promoting nothing more than ideologies and scientific racism (Whalsten, 2003).[1] Tucker (1994) acknowledges the right of researchers to pursue the research of their choice, but notes that research into racial differences in intelligence have been used primarily for ideological purposes without providing any scientific value. Ideological entities, for example, think-tanks, therefore, fund research on racial differences in intelligence and cite the research findings to bolster their work (Tucker, 2002).

In the process of legitimizing academic knowledge, power-cum-knowledge are two inseparable concepts in the discourse on human classification. In the name of preserving the mythical notion of a "pure" Aryan race, Germany's Nazi party in the 1930s undertook a systematic extermination of peoples of Jewish ancestry and other social "undesirables." Dominant sections of the Afrikaner population in South Africa perceived themselves as innately superior to all other groups and instituted the racist apartheid system. In both cases, universities offered the intellectual and political capital to legitimize misery and hate on human beings classified as "inferior" (World Bank, 2002b). As Parenti (2000) argues with reference to the United States, faculty, especially in the South, "actively devoted much of their intellectual energies to justifying slavery and injecting white supremacist notions into the overall curriculum" (p. 86).

Canadian Universities and Human Classification: Knowledge, Power, and Social Policy

Canadian universities, like their counterparts elsewhere, have been at the forefront in producing knowledge useful to their respective communities and the country as a whole. With regard to the discourse on human classification, a number of Canadian universities have been instrumental. McGill University in Montreal, Quebec, for example, from the latter part of the 1890s to the interwar years was "an important conduit for English hereditarian ideas into Canada" (McLaren, 1990, pp. 24-25). The university was, therefore, influential in recruiting academics to bolster work on hereditary and subsequently eugenics.

In the mid-1930s, McMaster University in Hamilton, Ontario approved a master's thesis written by T.C. Tommy Douglas that called for, among other things, the compulsory sterilization of criminals, people of low moral character, and by extension Canadian Aboriginals, "because they weakened the genetic heritage of Canada" (Byfield, 1997, p. 52). This is the same person who as Premier of the Province of Saskatchewan (1944-1961) is revered for his role in the history of Canada's universal health care system. Thus it can be argued that he changed his ideas on human types if not in thought, then at least in action by initiating and championing policy initiatives that are inclusive and beneficial to every member of society (Douglas, 2004).

The Canadian university that contributed the most to the discourse on human classification was the University of Alberta, and the person responsible for this prominent role was John M. MacEachran. The University was established in 1908, and in 1909 it hired John M. MacEachran who eventually became the founder and head of the Department of Philosophy and Psychology (Macdonald, 1958). MacEachran pursued his graduate studies at Queen's University in Kingston, Ontario, and his doctoral studies at the University of Leipzig, where he studied under Wilhelm Wundt, a pioneering authority in

experimental psychology. For his postdoctoral studies, MacEachran enrolled at the Sorbonne in Paris, where he took courses from Emile Durkheim, a giant in sociological theory (Wahlsten, 1999a). In sum, MacEachran at the time of his appointment at the University of Alberta had impeccable academic credentials.

As an intellectual, MacEachran was then capable of generating knowledge and had the power and authority to speak on issues relating to how that knowledge could be used in addressing social problems. The concern that consumed his intellectual and political capital was improvement of the human stock: the idea of eugenics. He had the opportunity to apply his knowledge when the Government of Alberta enacted the 1928 SSA and appointed him in 1929 as the Chair of the Board to implement the law (Government of Alberta, 1928). According to the Act, if the Board

> is unanimously of opinion that the patient might safely be discharged if the danger of procreation with its attendant risk of multiplication of the evil by transmission of the disability to progeny were eliminated, [it] may direct in writing such surgical operation for sexual sterilization of the inmate. (p. 117)

Possibly, in order to ensure the Act was on solid intellectual grounds, the SSA stipulated that "two of the said Board shall be medical practitioners nominated by the Senate of the University of Alberta and the Council of the College of Physicians respectively" (Government of Alberta, 1928, p. 117). The Senate (a body appointed by the Government of Alberta) nominated members to the Board once in a while. Thus the senators and top university officials (e.g., the President or Vice-President in Academic and Research Affairs) could not be unaware of the Board's activities with respect to human sterilization (Wahlsten, 1997).

Deriving its theoretical heritage from Darwin and Galton's work on improving the human stock, the Act was a crude application of Mendelism. The law had the support of powerful and influential segments of the Albertan society: the United Farmers of Alberta, the United Farm Women of Alberta, judicial minds like Emily Murphy (first female magistrate in the British Empire and prominent in the *Women as Persons* case), sections of the clergy, and politicians (Grekul, 2002; McLaren, 1990). The expected outcome of the law was to prevent Albertans from having to live with the progeny of defective human types and ultimately to create a society of "superior" human types. In his tenure as Chair of the Board (1929-1965), MacEachran signed the orders for sterilization of over 2,000 people (Wahlsten, 1997).

Knowledge, Power, and Social Policy: A Sociological Analysis

The work of MacEachran and the University of Alberta with respect to the Eugenics Board is an excellent example of an academic staff member and his institution offering community service. MacEachran, whom the Alberta Government appointed in 1929 as Chair of the Board, continued to offer his service to the community long after his retirement from the University in 1945, remaining as Chair of the Eugenics Board until 1965. The University of Alberta, it seems, although aware of what its appointees were doing in the community, did not show any keen sense in comprehending these activities. The archival record on John M. MacEachran illustrates this posture: "As part of his involvement with the Alberta community he was a member of the government's

Eugenics Board from 1929 to 1965" (University of Alberta Archives, 2005). Perhaps the benign tone of the archival record reflects how the university itself was implicated in the implementation of the sterilization policy.

Because the University nominated members to the Eugenics Board, it cannot, as stated above, claim a lack of knowledge about the Board's activities. Thus it is fair to argue that the University gave its tacit approval, even if reluctantly, to the activities of the Eugenics Board. The Chair of the Board from 1929 to 1945 also happened to be a University faculty member. Although this in itself does not indicate that MacEachran was working on behalf of the University, it underscores the nature of university-society relations. Political authorities often call on academics, especially those whose research agenda or results are consistent with the political establishment, to offer their expertise on social policies.

Furthermore, the then President of the University, R.C. Wallace (from 1928-1936), in a speech to the Canadian Medical Association in Calgary in 1934, acknowledged the extent to which science had improved the quality of domesticated animals. He therefore asked why researchers were not applying that knowledge to improving human stock and urged the physicians "to make eugenics not only a scientific philosophy but in very truth a religion" (Wallace, 1934, p. 429). The University President, it is obvious, must have been satisfied to have John M. MacEachran on staff actually using eugenics to improve the quality of human stock in the Province of Alberta.

In analyzing the theoretical origins of the SSA and the role of MacEachran in its implementation, a number of factors can be isolated. The Act would not have passed but for the support it received from powerful elements of Albertan society. Those powerful elements in turn invoked the name of academics, specifically MacEachran, who by then was the "most senior and respected academic in Alberta in his chosen fields" (Wahlsten, 1997, p. 191). MacEachran's impeccable academic credentials were more than sufficient to legitimize a social policy. As such the supposed science that informed his work on the Board was beyond reproach. After all, he was an academic and a concerned citizen who produced neutral and objective knowledge and was interested in creating a better society. Not questioned was whether his impeccable academic credentials did in fact also ensure a background of expertise in human classification. This seems to be a perennial problem when policymakers turn to the academy for guidance without the use of any broad-based peer-review mechanism.

A review of MacEachran's (1932a, 1932b) published work can provide, even if in a limited way, a glimpse into how he came to the conclusion of sterilization as a policy tool to improve the human race. MacEachran (1932a) showed a great admiration for the ideas of Plato and extensively used Plato's *Republic* as the philosophical basis of the eugenics policy (MacEachran, 1932b). However, MacEachran's position on eugenics was more in line with the racial purity theories of Ernst Haeckel and Herbert Spencer than that of Plato (Wahlsten, 1997).

If MacEachran had paid serious attention to the literature, he would have been aware of the valuable work of Myerson, Ayer, Putnam, Keeler, and Alexander (1936) and other geneticists in his day, and later of the United

Nations Educational, Scientific and Cultural Organization (UNESCO), discrediting theories of human classification and sterilization. The UNESCO conferences on race (1950, 1951, 1964, and 1967) discredited the notion of superior and inferior races, especially following the activities of the Nazis in the 1930s (Montagu, 1972). However, the work of the Sterilization Board, under MacEachran's leadership, did not show any sign of abating after World War II (Wahlsten, 1997). The Board was active even though the theoretical justification for its work was out of step with knowledge in psychology, sociology, and genetics. This suggests that MacEachran did not review the literature critical of human eugenics, or maybe he did, but did not agree with it.

University-society relations are double-edged. It is not surprising that a group of researchers at the same University of Alberta, in response to demands by sterilized women who wanted their fertility restored, reviewed the sterilization policy and the activities of the Sterilization Board (McWhirter & Weijer, 1969). Their report categorized the sterilization policy as "scientifically illiterate" and the policy itself as "a disgrace to the whole of Canada" (p. 430). In 1972 the law and the policy that has also been described as a "shameful blot on our past" (Institute of Law Reform and Research, 1988, p. 30) was repealed (Government of Alberta, 1972).

The role of MacEachran in the policy and the policy itself suggest that knowledge systems, especially those produced in universities and their social effects, are incomplete, and often their latent implications are poorly understood. However, because academic knowledge has an unstated assumption of objectivity and rationality, the appropriation of that knowledge is a fact in any society. Otherwise, one still has to explain why a social policy based on a body of discredited knowledge survived a 44-year period in Alberta. It is also important to note that although eugenics principles originated in England, they did not have a strong effect there precisely because of powerful arguments made by some academics (Langdon-Down, 1926/1927). It seems that in the Alberta of the 1920s no such arguments, even if they were made, deterred the passage and subsequent implementation of the law.[2] Of significant concern in this study, however, is the intellectual dimension of the policy.

When Lelani Muir, who was sterilized, successfully sued the Government of Alberta, the role of MacEachran in the policy was brought to the fore (Veit, 1996). The court case set into motion an intriguing set of reactions in the University of Alberta and beyond. The Department of Psychology, where MacEachran was the first head, decided to reduce his hitherto visible presence. A comfortable room in the Department and a lecture series that were named after him had name changes (Wahlsten, 1999b). This move led to vociferous criticisms, support and condemnations from various segments within and outside the university (Wahlsten, 1999b).

Critics condemned the Department of Psychology for its move to tarnish MacEachran's legacy. There was a contention, for example, that the Department's action was "airbrushing" the "past" (Wahlsten, 1999b, p. 229). The Department of Psychology, however, argued that it was not airbrushing history, and that MacEachran "lacked the training and expertise to judge anybody's likelihood of transmitting a mental defect to progeny or even to assess mental deficiency" (Wahlsten, 1999b, p. 217).

Writing after MacEachran's death in 1971, *New Trail*, the alumni magazine, described his invaluable contributions to the university and noted how he was known for "a spirit of open-mindedness, liberalism and tolerance" (Wahlsten, 1999a, pp. 30-31). No mention was made of his community work with respect to the Sterilization Law and its effect on the community. This background of omission informs Wahlsten's contention about the need for the Department of Psychology to come to terms with its past and acknowledge "that MacEachran *taught a lot of students some very bad ideas*, and … used his University position to propagate his ideas about eugenics" (Wahlsten, 1999b, p. 203, emphasis mine). Teaching students very bad ideas when universities are supposed to be neutral and objective producers of knowledge with respect to critical pedagogy offers a model that raises troubling questions about the nature of the relationship between educators and students and for society at large.

Critical Pedagogy, Educators and Learners, and University-Society Relations
Because MacEachran was an educator, his role in the SSA in the framework of critical pedagogy has several implications for analyzing contemporary educator-learner relations in particular and university-society relations in general. The need for this examination, particularly in Canada, is because of the changing profile of learners, ongoing contests about the relevance of knowledge forms for educational outcomes, as well as the power and authority of educators in the institutional setting and in the larger society. Critical pedagogy as a perspective reminds educators to value the knowledge of their learners. This is because, as Freire (1993) says, learners do not come to the classroom as blank vessels to be filled with the wisdom of the educators. Rather, they have their unique experiences that would interact with those of the educator.

Critical pedagogy seeks to use the experiences of the learners and does not dismiss those experiences as irrelevant, because "student experiences and their historical, social, and cultural conditions must be viewed as primary sources of knowledge if they are to be subjects, and involved in the productive educational process" (Ghosh & Abdi, 2004, p. 24). The task, then, is to construct a framework that speaks to the relevance of, and not just accommodates, diverse experiences of both educators and learners.

One important feature to consider in constructing a critical framework is the profile of learners. Comparatively speaking, the profile of learners and educators in MacEachran's time was relatively homogeneous. Universities in the early history of higher education in Canada, "only educated a small percentage of the population" (Jones, 1998b, p. 8). The small percentage of the population was made up of "children of the provincial elites [and] there were no major confrontations over admissions, over the course content or student discipline, because both groups [provincial elites and university officials] shared the same social values" (Neatby, 1987, p. 34). In a climate of relative homogeneity and consensus, one can argue that the knowledge MacEachran propagated with reference to human classification mirrored the social experiences of the learners. MacEachran, his power, and knowledge as an educator would have been acknowledged and accepted by his learners (Muller, 1996).

Heterogeneity of learners and educators is the main feature of the contemporary classroom in many Canadian institutions of higher education; even though as Dei (2005) argues, there are few full-time or permanent minority

faculty in Canadian institutions of higher learning. A diverse profile of learners will require educators (e.g., both dominant and minority groups) to ensure that the knowledge forms they propagate relate to "mixed student groups with a range of prior experiences stemming from varied social class, language, and cultural backgrounds" (Abdi & Cleghorn, 2005, p. 5). A critical perspective needs to be brought to bear on knowledge forms that tend to denigrate one group, especially when there is considerable evidence to show that such knowledge forms (e.g., those on human classification) flow more from myth than from systematic evidence.

The need for critical forms of enquiry also stems from the argument that learners offer considerable resistance when educators present knowledge systems that do not reflect the realities or experiences of their social existence or denigrate their group (Codjoe, 2005, 2006). Propagating uncritical knowledge also accounts for the disengagement of some learners from the educational system (Dei, Holmes, Mazzuca, McIsaac, & Campbell, 1995). Educators thus have to create knowledge with, but not for, their learners if the policy objective of the educational system is to maximize outcomes for all groups of learners. Indeed, critical pedagogy "forces educators … to clarify the nature and significance of educational practices while they maintain awareness of the social contexts [and contests] that shape educational possibilities and limitations" (Wotherspoon, 1998, p. 39).

Although MacEachran might have dealt with a relatively homogeneous group and presented knowledge that mirrored their experiences, hence the likelihood of minimal resistance, the present-day educator faces a diverse group of learners and contested forms of knowledge. In this environment a critical pedagogue will be confronted with the prospect of losing his or her control over power and knowledge production to the learners. The issue here is the loss of authority that might undermine and possibly disrupt the supposed orderly workings of the classroom. Although this is a legitimate concern, it shows a displacement of a critical teaching objective. Learners are not robots who should be expected to imbibe the wisdom and knowledge of their educators. Instead, critical educators have to make an effort "to provide the student with a systematic, critical introduction to the intellectual traditions that inform or challenge the precepts of contemporary life" (Aronowitz, 2000, pp. 168-169).

In a critical pedagogical framework, educators and learners as active agents, together with the wider society, can interrogate knowledge and, one hopes, offer critical and nuanced ideas to address the human condition (Griffiths, 2000; Vincent & Martin, 2000). Thus in the current context, if educators do not subject their knowledge claims to interrogation, it implies that the knowledge they propagate "is less likely to be critical … speak to the social situation of [diverse] learners, let alone empower them" (Puplampu, 2004, p. 177). For the academic, the implicit dialogical process will contribute to what Nixon, Marks, and Walker (2001) refer to as "emergent professionalism." Such professionals have the desire and "capacity to listen to, learn from, and move forward with the communities they serve" (p. 234).

The above calls for new ways of understanding the relationship between educators and learners, especially given that educators now have to interact with a diverse group of learners and cannot simply recycle uncritical forms of

knowledge. It is important to stress that MacEachran did not necessarily have more power by propagating uncritical forms of knowledge, and the contemporary educator is not powerless because of the need to present knowledge that speaks to the varied experiences of learners. There is no question that even in a critical or reconstructed framework, educators will still retain considerable authority as knowledge producers. Rather, because a political context always informs the intended and unintended uses of academic knowledge, a reconstructed framework will require that academics be aware of the politics of their work and consequences, "even if it means rupturing the pretence of objectivity that the 'ivory tower' confers, or upsetting the forces that benefit from the silences and inaction of [their activities]" (Kassam & Tettey, 2003, p. 170).

A restructured relationship between educators and learners comprises questions about ethics, academic freedom, and responsibility. As professionals, academics are expected to exhibit a high sense of self-restraint and maintain high standards of performance. An ethical component of their professionalism will require that teaching and research activities are guided by sound judgment and standards of conduct. From the perspective of critical pedagogy, these assumptions should not be taken at face value, but must be part of the general ethos of professional academic life. This is a life that seeks a better understanding of the "complex working out of values at the level not only of organizational structure, but of individual and group practice" (Nixon et al., 2001, p. 231). The ethical concern is not so much the reinterpretation of academic freedom argued by Dworkin (1996), but rather "a reorientation of professional values and practices such that academic workers 'use' their academic freedom as 'freedom for others'" (Nixon et al., p. 236).

Professional reorientation is called for because MacEachran, either intentionally or unintentionally, contributed to operationalizing the curriculum (both stated and hidden) in his day. Contemporary academics require reorientation because some of their work accounts for the significant absences, both in the stated and hidden aspects of the curriculum, in the explanation that Canadian schools have historically presented about the contributions of various groups in Canadian society (Dei, 1993). For example, there have been no insightful and comprehensive accounts or systematic integration of the roles and achievements of First Nations peoples and Canadians of African origin into what is supposed to be a pan-Canadian body of knowledge (Dei, 2005; Codjoe, 2005).

The underlying reason for the lack of insightful accounts is how power influences the definition of legitimate knowledge, and hence its worthiness for inclusion in the educational curriculum. Thus in the specific case of African-related knowledge in Canada, there has been no attempt to incorporate the theoretical knowledge advanced by some of the leading theoreticians in that field or their work read in "critical ways that challenge the status quo" (Codjoe, 2005, p, 66). These absences continue even as academics trumpet the noble ideas of objectivity and neutrality. The MacEachran case shows that given the intricate relationship between power and knowledge, the presumed objectivity and neutrality of academic knowledge are ideal propositions. As such, present-day educators must make a conscious effort to emphasize academic responsi-

bility if education is to contribute to building and sustaining society, and also to teach about individual and group responsibilities (Dei, 2005; Nixon et al., 2001). To be sure, no educator has absolute freedom. There are systematic and systemic controls on academics. As Dei argues, a young, untenured academic in the name of academic freedom

> cannot simply publish anywhere and expect to get tenure and promotion. A tenured professor whose work is deemed not to carry maximum pedagogic and communicative effect as far as the university's clientele is concerned will soon find out that there is a cost. (p. 105)

Another constraint on universities that has implications for knowledge production and educator-student relationship is the source of their funding. Although education is a provincial responsibility in Canada, the federal government has been a major source of funding of higher education (Fisher & Rubenson, 1998).

As the historical source of funding for higher education, the state used this role to legitimize knowledge production, as exemplified by MacEachran's role in Alberta's SSA, and to control the activities of universities. For example, a Minister of Education in Ontario once appointed a professor to the University of Toronto without consulting the University President (Jones, 1998b). The historical role of the state in funding higher education has undergone considerable changes due to or in response to forces of globalization. One aspect of the change has been the cutback in government funding to higher education across Canada (Canadian Association of University Teachers, 2004, 2005).

The shortfalls in state funding while the demand and relevance for higher education continue to be immense account for the current trends toward commercialization, in which for-profit organizations, both large and small, have a prominent role in the Canadian academy (Puplampu, 2004; Tudiver, 1999; Turk, 2000). Operating in a market model, the role of for-profit organizations has given rise to a relentless pressure on universities to frame the relationship between educators and learners in the market language of providers and customers or clients (Pocklington & Tupper, 2002; Puplampu; Turk). The unfolding relationship has implications for knowledge production and legitimacy.

For the educator the pressure is to produce knowledge that has market value; although a successful market item might be dogmatic and have little social relevance, for example, in pushing the frontiers of social justice (Tucker, 2002). For academics who are critical of market-oriented knowledge or who are unable to produce knowledge that has immediate market value, their voices cannot be heard, and their knowledge production capabilities can be negatively affected (Olivieri, 2000; Thompson, Baird, & Downie, 2001).

For the learner, the market arrangement could in extreme cases become constraining. Chomsky (in White, 2000) recounts the case of a student at the Massachusetts Institute of Technology who refused to answer an examination question because "the answer was worked in some project on which he was working under some professor who was intending to begin a start-up company … and didn't want anybody to know about it [the answer]" (p. 450). In such an environment, inter-faculty sharing of ideas and educator-learner dialogue

would be kept to the minimum. The common effect will be a poorer knowledge pool. Linking knowledge production and propagation to uncritical notions of market outcomes will minimize the ability of universities to nurture minds that are critical and appreciative of diverse ways of knowing (Dei, Hall, & Rosenberg, 2000).

Another related constraint in creating a critical framework of educator-learner relations is university-society relations. Despite pretensions to the contrary, universities are part of the larger social system and are not autonomous entities. As argued above, powerful groups in Alberta supported the passage of the SSA. These groups in turn looked up to MacEachran as an academic who had the requisite knowledge and power in implementing the law. Therefore, issues emanating from the larger social system can either promote or inhibit the basis for a critical educational experience (Taylor, 2001a, 2001b). For example, the general society and the university (administrators and academic laborers) might be on different pages with respect to the discourse on inclusiveness and diversity, especially because the market model presents universities as liberal institutions that promote diversity or plurality of views. However, as Parenti (2000) contends, the idea of a liberal university promoting plurality of views, especially in the US, is a myth.

Parenti (2000) identifies several instances where conservative voices silenced faculty members with different views on major social and political issues in the US. The argument here is the presumed objectivity and neutrality of academic labor. Although all forms of academic work are political projects with the ascendancy of the market-model, academics who do not say the "right things" (p. 91) risk the possibility of being sidelined in the academy. Wealthy private donors and their foundations that often support the academy and fund academic research determine what those "right things" entail (Khemlko, 1996; Tucker, 2002).

The above discussion shows how the intricate relationship between knowledge and power plays a major role in legitimizing knowledge. The power dynamics not unexpectedly thus serve as constraints on what kind of knowledge is valued and considered legitimate. When the state was the major source of funding for higher education, it used that role to define legitimate knowledge and its use. The increasing role of for-profit actors also means that such actors will also define legitimate knowledge and its use. Consequently, the level of support that educators and learners can garner and receive from the wider society (state and non-state actors) cannot be overemphasized if the goal of creating an environment conducive to a critical education is to be attained, more so if universities are to create "socially-responsible and better informed epistemic communities" (Kassam & Tettey, 2003, p. 170).

Conclusion

This study examined the role of academic knowledge in social policy, educator-learner relations, and the implications for university-society relations, with specific reference to Alberta's reproductive sterilization policy. Drawing on critical pedagogy, the study situated academic knowledge and the sterilization policy in the broader context of the discourse on human classification. Universities, the study argued, operate under a number of unstated assumptions, and the knowledge they produce theoretically is privileged. It is, therefore, not

surprising that political authorities often seek academic knowledge and even involve academics to lend some credibility and legitimacy to the initiation and implementation of social policies.

The MacEachran affair engenders several questions. Did the University of Alberta learn any lessons from the MacEachran affair, and how are these lessons being applied in its current *Research Makes Sense* environment? Can such an episode occur again at the University of Alberta or any other university? Indeed, because the university is a repository of knowledge and this knowledge is likely to be used in the policy process in one way or another, how would society be assured that academic knowledge and power are not misused? In other words, can society ever be protected from the power and knowledge of academic experts or professionals? These and other questions take on an added significance with the dramatic breakthroughs in genetics, specifically the successful mapping of the human genome. The implications of genetic information would require that academics and the scientific community remain vigilant and remind policymakers that science can be socially and politically abused (Cunningham-Burley & Kerr, 1999; Kuna, 2001).

Knowledge itself, like power, is socially determined, and the use of any kind of knowledge to address social concerns, no matter how the issues are constructed, should proceed with a certain level of tentativeness and adequate safeguards. In the implementation of Alberta's sterilization policy, MacEachran, the University of Alberta, and the Government of Alberta simply threw caution to the wind. The Act and its implementation "were inspired and imbued with a sense of righteousness by … political leaders as well as theoreticians with academic credentials" (Wahlsten, 1998, p. 23). Myth and science found good company with knowledge and power, reinforcing each other as the supposedly "lesser" human types were led into surgical theaters in the name of creating a "better" society. The task facing educators, learners, and society at large is how to ensure that there is an environment that not only continually questions what passes as knowledge, but also how that knowledge is used. Here is one issue that institutions of higher learning, educators, learners, and the general society would have to grapple with in a knowledge-driven 21st-century environment.

Notes

1. See for example, Herrnstein and Murray (1994) and Rushton (1995). Social scientists are not alone in promoting scientific racism. For the role of medical scientists in the US Public Health Service, especially in the selection of the study subjects, in the now infamous Tuskegee Syphillis Study form 1932 to 1972, see Brandt (1997) and Jones (1993).
2. The obvious question that remains is why the policy was vigorously pursued in Alberta and not in other Canadian jurisdictions that also had eugenic policies. Analysts have theorized the nature of the political, economic, and social forces in the Alberta of the 1920s. For a detailed look at why the policy was implemented vigorously in Alberta and not in other places in Canada, like British Columbia, see Grekul (2002).

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