

## Chapter XIV

# Ethics Review Concerns of Canada's Distance Researchers

**Patrick J. Fahy**  
*Athabasca University, Canada*

### ABSTRACT

*Ethics review of research involving humans is intended to protect human dignity by balancing harms and benefits. The foci and methods used in reviews vary nationally, but tend, as in Canada, to address core principles including free and informed consent, privacy and confidentiality, inclusiveness and fairness, and the rights of dependent subjects. Under examination in relation to the policy that governs research ethics in Canada, the Tri-Council Policy Statement (TCPS, 2005), these principles admit numerous exceptions, a fact that, as shown by a study reported here, is better understood by those actually engaged in research than those who are not. The implications of these findings, and the specific priorities of non-Canadian researchers (especially those in developing nations), are described and discussed.*

### BACKGROUND

The global increase in online and distance programming has resulted in widespread interest on the part of researchers in exploring and analyzing distance learning processes and outcomes (Bucharest Declaration, 2004; Mishra, 1998; *Tri-council Policy Statement* [TCPS], 2005). At the same time, granting agencies almost globally have increased their scrutiny of the ethics of research involving humans, especially in universities and

other centres where public funding is typically used by researchers.

While distance practitioners internationally appear almost universally to support research standards (Gordon & Sork, 2001), in the view of some the effect of increased scrutiny by some ethics review has sometimes been deleterious, constraining unnecessarily the scope of inquiry, inhibiting or limiting innovative or unconventional methods, lengthening and complicating the process of gaining research approvals, whether

externally funded or not, and, in some particularly unfortunate cases, resulting in the outright cancellation of projects (“Complexity of the IRB process,” 2005; Rourke, Anderson, Garrison, & Archer, 2001; Savulescu, Chalmers, & Blunt, 1996). The impact on distance researchers has been particularly severe, as distance research almost always involves human subjects, and often entails the collection and analysis of personal data.

In Canada, the *Tri-council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS, 2005) is the federal government’s statement on research ethics principles applicable to institutions receiving federal funding (Medical Research Council of Canada, 2005). The TCPS articulates the standards that Research Ethics Boards (REBs), responsible for applying the TCPS institutionally, must enforce. The purpose of the TCPS is to assure ethical treatment of human research subjects in Canada. While there is no debate about the worth of this objective, there have been several conflicts since the appearance of the TCPS in 1998 over how this goal might best be achieved. Specifically, there is lively debate about whether the current policy guarantees appropriate freedom for researchers, especially those in the social sciences and humanities, whose work is typically minimal- or no-risk.

The nature of core ethical principles contained in the TCPS, their interpretations, their similarities to and differences from global standards and concerns, and some of the implications of these for distance research are discussed in the following.

## **IDENTIFYING CORE ETHICAL PRINCIPLES**

The objections of social sciences and humanities researchers to aspects of the Canada’s TCPS, and to some practices of REBs in implementing it, do not question the importance of ethical treatment of subjects. There are two issues: how

distance research, as a form of social science inquiry, may adhere to high ethical standards, given the special circumstances under which that research is often conducted; and how the approval process for distance research might be revised—made “proportionate”—to the low levels of risk that usually accompany these proposals (TCPS, 2005, p. 1.7).

The debate about core ethical principles and proportionate review of proposals is not new. Globally, ethics in human subjects’ research has been the subject of increasingly heated debate for some time, in North America even appearing in the popular press. Beck and Kaufman (1994) some time ago identified various ethical “pitfalls” that could entrap researchers; in 2002, Begley (2002) described, in *The Wall Street Journal*, a growing “rift” between researchers and ethicists; more recently, others (Dohy, 2004; Elliott & Lemmens, 2005; Lemonick & Goldstein, 2002; Munro, 2004) have publicly raised questions about doubtful practices such as paid ethics review in clinical trials, while bloggers have debated the impartiality of online product reviews (Lasica, 2005).

To create a common ethics framework for researchers and those responsible for reviewing and approving research proposals, policies such as the TCPS present principles that researchers must respect and REBs enforce. Key principles contained in the TCPS include:

- Respect for human dignity
- Free and informed consent
- Privacy and confidentiality
- Inclusiveness and justice
- Balancing of harms and benefits
- The status of “subjects” in clinical and nonclinical research
- The role and composition of REBs

Human dignity. Interest in this principle arises chiefly from the emergence of programs of systematic, industry-funded medical research (Evans & Jakupec, 1996, p. 72), and from egregious

violations of basic ethical principles, such as the Tuskegee syphilis study (Centers for Disease Control and Prevention, 2005), and the Willowbrook hepatitis studies (University of Utah, 2005). The underlying ethical principle is that respect for persons requires they not be used solely as means to ends, and that “the multiple and interdependent interests of the person” (including the right to effective treatment or therapy) be protected in any research studies (TCPS, 2005, p. i.5). Most ethics policies hold that the rights of subjects should always take precedence over the advancement of knowledge (TCPS, 2005, p. 74). Under this principle, special protection is provided heteronomous (dependent) groups or persons (those not capable of exercising fully freedom of choice, or of protecting their own interests independently). This includes cross-cultural or power-authority situations, where subjects (e.g., patients, inmates, students, minors, clients, etc.) might be the victims, even inadvertently, of coercion (TCPS, 2005, p. 2.4; Rigano, 2001).

Human dignity is respected when researchers obtain and maintain the free and informed consent of subjects throughout their research involvement. However, there are many exceptions to this surprisingly complex principle.

Free and informed consent. Also spoken of as the “cornerstone” of ethical research (McNamee, 2001; O'Connor, 2002; Vujakovic & Bullard, 2001), the TCPS calls informed consent “the heart of ethical research involving humans” (TCPS, 2005, p. 2.1). Despite its primacy, however, there are a wide variety of situations in which the TCPS recognizes that informed consent can either be waived completely, obtained after the fact, or suspended (TCPS, 2005, p. 2.1):

1. The research is minimal risk.
2. The waiver is unlikely to adversely affect the rights and welfare of the subjects.
3. The research could not practicably be carried out without it.

4. Subjects will be provided with additional information after participation, “whenever possible and appropriate.”
5. A therapeutic intervention is not involved (normally covered by point 1).

In situations where full informed consent cannot be obtained under one or more of the above exemptions, the TCPS suggests that subjects be debriefed after participation, when “feasible.” Where subjects object to participation for any reason after the debriefing, they may be given the opportunity to remove themselves and their data from the study (TCPS, 2005, p. 2.3). However, the researcher need not grant requests for removal of data if doing so might “colour the responses of the [other] subjects and thus invalidate the research” (TCPS, 2005, pp. 2.2-2.3).

This exception is important, as it recognizes the legitimate rights of the majority to participate in research, even over the objections of some (Under this principle, the barrier encountered by Rourke, Anderson, Garrison, and Archer (2001), where one objecting member of a group caused an entire sponsored research project to be cancelled, might have been surmounted.) The TCPS states this right to participate clearly:

*In cases where a subject expresses concerns about a study, the researcher may give the subject the option of removing his or her data from the project. **This approach should be used only when the elimination of the subject's data will not compromise the validity of the research design, and hence diminish the ethical value of participation by other subjects.*** (TCPS, 2005, p. 2.3; emphasis added)

The following shows that the rights of the minority are confined to personal refusal to participate:

***Nothing** in this Policy should be interpreted to mean that research subjects have the right to veto*

*a project, though they do, of course, have the right to refuse to cooperate with the researcher(s).* (TCPS, 2005, p. 1.2; emphasis added)

Several other exemptions to the principle of informed consent are acknowledged by the TCPS, giving researchers the right to deal *without their cooperation* with certain individuals and organizations:

1. **Public bodies and corporations**, including governments, political parties, authoritarian organizations, and criminal groups (TCPS, 2005, p. 2.2).
2. **Private organizations**. These may decline to participate, deny access to private records, and attempt to set limits on the participation of members or employees, but they are not permitted to limit or veto research about their own activities, and their participation or consent for research are not needed (TCPS, 2005, p. 2.2).
3. **Public figures**. "Certain types of research ... may legitimately have a negative effect on public figures ... ." (TCPS, 2005, p. 1.6), including all "public" persons, artists and performers (and their works), politicians, and business leaders (TCPS, 2005, p. i.9).
4. **Subjects of naturalistic observation**. If subjects are not identified, and events are not staged, the TCPS suggests these studies be regarded as minimal risk; if the participants expect visibility (i.e., at a political rally), consent may be assumed (pp. 2.4-2.5).
5. **Students in classroom and course evaluations**. "Nothing in this Section [Article 2.4] should be interpreted as meaning that normal classroom assessments of course work require REB approval" (TCPS, 2005, p. 2.6).
6. **Those involved in quality assurance and performance reviews**. "Quality assurance studies, performance reviews or testing within normal educational requirements

should also not be subject to REB approval" (TCPS, 2005, p. 1.1).

Privacy and confidentiality. This is truly a cornerstone principle, arguably more central than any other in research with human subjects. Evans and Jakupiec (1996) state that anonymity addresses many ethical issues in research. The TCPS observes that "in many cultures, privacy and confidentiality are considered fundamental to human dignity" (TCPS, 2005, p. i.5); further, "privacy is a fundamental value, perceived by many as essential for the protection and promotion of human dignity" (TCPS, 2005, p. 3.1). Gordon and Sork (2001) found that confidentiality was the most sensitive ethical issue among adult education practitioners, especially any sharing of information regarded as private.

While the TCPS calls privacy "a fundamental value" (TCPS, 2005, p. 3.1), it is not absolute. Issues affecting the public good (e.g., public health and safety, and, increasingly, security preservation and crime prevention) may ethically require disclosure of some personal information. Further, use of information already in the public domain, even of identifiable nonpublic persons, is permitted (TCPS, 2005, p. 3.2), as is information under subpoena. Exemptions to the privacy principle suggest that it is not the collection of personal data per se that is problematic in evaluating risks, it is subsequent use (Population, Inc., 2001; "The logic of privacy," 2007).

It can be argued that postings to public listservs or blogs, and information in non-password-protected Web sites, are not protected by privacy or confidentiality provisions of the Policy. Even password-protected postings, if used under "secondary use of data" provisions, may be accessed: "If it is impossible to identify individuals whose records exist within a database, then researchers should be allowed access to that database" (TCPS, 2005, p. 3.5).

Justice and inclusiveness. This principle is intended to assure that no group bears an unfair

burden, or enjoys disproportionately the benefits, of research. Respecting this principle requires development of a sound research methodology (to assure an efficient experience for those participating), anonymity, and protection of private information in any published reports.

The principle of justice and inclusiveness ethically extends to researchers themselves. Social science and humanities researchers in Canada have asserted their “traditional mandate to gather information about and critically analyze all aspects of society,” which some feel is “threatened by a narrowing of permissible topics and approaches” due to concern for “non-ethics criteria such as liability management and other forms of ‘ethics drift’” (van den Hoonaard, 2004, p. 12). Studying traditionally sensitive topics and exploring the margins of society require that social scientists be permitted access to salient research methods and approaches, even over the objections of those who might be discomfited by their inquiries or findings. This argument asserts that society’s “right to know” is accompanied by a “right to find out,” shared by practitioners of disciplines that systematically study human behavior. Academic freedom in the social sciences demands, this argument concludes, that these special and traditional rights of inquiry be safeguarded.

Balancing harms and benefits. Ethical review is intended to assure that any potential harms are compensated for by the prospective benefits of research. O’Connor (2002) argues that no research is completely harmless. Others claim that perceptions of ethical soundness depend upon one’s point of view (Pendlebury & Enslin, 2001), sometimes to the disadvantage of developing countries which are trying to “keep up,” often simply through “mimicry” of the West (Leach & Oakland, 2007; Yang, 2001). The TCPS holds that a balanced assessment of the potential harms and possible benefits of research, employing multiple points of view and without privileging any particular disciplinary or moral perspective, is required (TCPS, 2005, p. i.2; Small, 2001). As

a consequence, as noted earlier, some ethical approaches and forms of research, while having the clear potential for negative effects on identifiable persons, institutions, or organizations, are ethically permissible because an assessment of social benefit vs. individual harm favors the former, despite the latter (TCPS, 2005, p. i.9).

Key points in the assessment of harms and benefits include the following: 1) the TCPS does not require that research be free of all risk, only of *unnecessary* risks; 2) all the risks potentially present in the research do not have to be known or addressed before research can be commenced (indeed, identifying and assessing risks to humans is often a central purpose of research) (TCPS, 2005, p. i.6); 3) acceptance of obvious and suspected risks may be justified, if subjects consent and the potential benefits outweigh them; and 4) in cases where risks are known, the researcher’s responsibility is to assure participants accept the possibility of harm initially, and continue to do so throughout their involvement.

Clinical and nonclinical research. Those who work in predominantly minimal-risk (nonclinical) research situations have argued with increasing vigor that the only research that warrants stringent REB review is that which exceeds minimal risk. The difficulty seen by social scientists is that they are subject to default assumptions about risk, applicable to biomedical situations but often grossly inappropriate in most humanities and social sciences contexts. It is suggested that REBs should be required to specify the “identifiable harms” in any research to which they object (van den Hoonaard, 2004, p. 6), rather than placing the onus on researchers to prove no harms exist or might arise (Proving the impossibility of any phenomenon, it is argued, is logically impossible.)

The stance of social science and humanities researchers in Canada has hardened in the face of what they regard as a “one size fits all” mentality of the TCPS and its developers. One description of changes needed to address problems with the current ethics policy reads in part:

*... [the] next version [of the TCPS must] acknowledge and respond to the diversity in research perspectives, reassert a commitment to principles of academic freedom, and ensure adequate protection for human participants. Doing so will require bold initiatives ... to create an effective counterbalance to the biomedical/experimental hegemony that currently dominates the TCPS and that ... threatens the diversity of the social sciences and humanities and their ability to carry out their traditional social and cultural mandate. (van den Hoonaard, 2004, p. 10)*

In addition to the historical examples of abuse in experimental biomedical research mentioned earlier, Canadian researchers' concerns about ethics in clinical trials have more recently been piqued, and focused, by the highly public case of University of Toronto researcher Dr. Nancy Olivieri. Dr. Olivieri claimed the right to inform her subject (also her patients) at the Hospital for Sick Children of potentially serious side-effects of an experimental drug treatment. When she did so over the objections of the drug's owner, in the view of the Canadian Association of University Teachers (CAUT), her university and her employer failed to support her promptly or adequately in the ensuing public and legal brouhaha. While the details of the dispute are murky (for some patients the treatment appeared effective, and was continued), the fundamental ethical issue, not always clear in the press, was the researcher's duty to advise her subjects that the experimental conditions had changed, and that data were now in hand indicating the treatment might have potentially more serious risks than had been known when the subjects agreed to participate (Thompson, Baird, & Downie, 2002). Researchers in the social sciences and humanities insist that this sort of imbroglio is vanishingly less likely to arise in their fields.

The role and composition of REBs. Another perceived irritant for distance researchers in Canada arises from the composition and structure

of the ethics board (REBs) that enforce the policy. According to the TCPS, REBs should consist of at least five persons, academics and nonacademics, two of whom having "broad expertise" in the types of research the board will be reviewing. There is no requirement that members be researchers or, in the case of disciplines such as distance education, that they even be familiar with the field.

REBs have a great deal of autonomy in their workings and decision-making processes. This autonomy, when coupled with a lack of experience with or knowledge of research practices, may cause problems social science researchers regard as predictable (van den Hoonaard, 2004).

### **VIEWS OF CANADIAN RESEARCHERS: NEEDED CHANGES TO RESEARCH POLICY AND PRACTICES**

In response to the problems described above, and based on numerous and persistent complaints about the treatment that social science and humanities researchers encountered under the TCPS, the Social Sciences and Humanities Research Ethics Special Working Committee (van den Hoonaard, 2004) produced a list of specific recommendations, some, as discussed later, with international applicability. These include:

- Greater clarity over the distinction between "minimal risk" and "identifiable harm."
- Respect for the rights of researchers, especially those engaged in research of minimal or lower risk (Costley and Gibbs's (2006) international perspective, and their concept of the "ethics of care," suggests that researchers have differing obligations as a result of their specific context, particularly their relation to the people and objects under study).
- A more nuanced understanding of fundamental principles such as informed consent,

confidentiality, and anonymity (Gardner's (2005) view of the importance of intercultural perceptions and conceptions apply here).

- Respect for standard practices in different disciplines.
- Acknowledgement of the needs and rights of student researchers (Husu (2004) speaks of the need for "reference points," to help novices and practitioners translate abstract theories into useful principles in specific situations).
- Overall, a need to acknowledge the greater variety of research methods as found in the social sciences and humanities (pp. 5-6).

Such requests both confirm a problem in regard to ethics review in Canada, and lay out what may be required in the way of change to the existing process. The views of researchers are critical, because, as the TCPS points out:

*... ethical principles must operate neither in the abstract, nor in isolation from one another. Ethical principles are sometimes criticized as being applied in formulaic ways. To avoid this, they should be applied in the context of the nature of the research and of the ethical norms and practices of the relevant research discipline. Good ethical reasoning requires thought, insight and sensitivity to context...* (TCPS, 2005, p. i.9; emphasis supplied)

Mugridge and Kaufman (1986) have previously applied the concept of *context* to training, arguing that distance researchers should learn within the community in which they subsequently intend to work. They believe an apprenticeship in the community of intended practice, even online, would ensure standards were learned effectively. The following section describes a study intended to determine whether this has occurred in Canada.

## Survey of Distance Practitioners Regarding The TCPS

In 2003, a study was conducted of the views of Canadian distance educators about principles contained in the TCPS (Fahy & Spencer, 2004). The purpose of the study (nothing similar to which had been previously conducted) was to determine the views of distance practitioners, scholars, and students, with varying research backgrounds (including, by their own assessment, none), concerning selected ethical principles found in the TCPS. Volunteers were recruited by invitations posted on the Web sites of three Canadian distance education organizations: the Alberta Distance Education and Training Association (ADETA), the Canadian Association for Distance Education (CADE), and Athabasca University's Centre for Distance Education. A further group of "researchers," who had published papers within the recent past in the CADE *Journal of Distance Education (JDE)*, were personally invited to participate.

In the analysis, the views of respondents were examined on two criteria: self-described research experience (from "none" to "high"), and a record of recent research publication (published and not published). The research questions were:

1. To what degree does self-assessed research experience (including none) affect agreement with selected ethical principles?
2. To what degree do the views of published researchers differ from those of other distance education practitioners?

The survey instrument was a questionnaire consisting of 31 statements about ethics in research, reflecting principles which experience had shown produced problems of interpretation (the authors had both been members of their institutional REB, and Research Ethics Appeal Board (REAB)). Eighteen of the statements used in the questionnaire were consistent with principles

found in the TCPS, while 13 were contrary to, or asserted positions not found in, the TCPS. Participants were asked to rate their agreement with the items using a 7-point Likert-type scale.

Of the 172 usable returns received, 68% were from women; over 97% of respondents held at least one degree (18% held doctorates), and 15% assessed their research experience as “high” (23% “moderate”). Twenty-four percent rated their ethics experience as “none,” and 50% rated it “low.” Only 11% had experience serving on an REB. Forty-eight percent of the respondents rated their familiarity with the TCPS as “none,” while 5% rated it “high.”

A major finding of the study was that, when faced with pronouncements that purported to reflect ethical positions, the subjects with the most research experience were more likely to agree with statements consistent with the TCPS, and to disagree with statements inconsistent with the policy. Further, experienced researchers (those who had published) were less likely to agree with categorical statements containing the terms “never,” “always,” and “must” (rare in the TCPS, where “... because principles are designed to guide ethical reflection and conduct, they admit flexibility and exceptions;” TCPS, 2005, p. i.9).

The conclusions of the study included several observations potentially applicable to international problems in ethics review of distance research. First, it was apparent that those who were not active researchers (those without recent publications) were much less likely to have familiarity with the ethics adjudication process, or with the TCPS: 27% of this group rated their experience judging the ethics of research proposals as “none,” and 54% rated it “low.” Further, 50% of the nonresearchers admitted “no” familiarity with the TCPS, and a further 37% claimed only “low” levels of experience; 97% of this group reported “no” direct REB experience.

It was also clear that nonresearchers tended to be more dogmatic (were “more royalist than the king”) in relation to ethical principles: they were

prepared to place more restrictions on researchers than were actually required by the TCPS. On the following items, all of which in fact *are consistent* with the TCPS, nonresearchers expressed *less agreement* than researchers:

- Ethics review should incorporate flexibility in the implementation of common principles.
- In assessing a research proposal, the ethical review process should consider the nature of the research and the ethical norms and practices of the relevant research discipline.
- The principle of proportionate review permits research which exposes human subjects to minimal risk or less to receive only minimal review.
- Subjects do not have the right to veto a project.
- The requirement for informed consent may be waived, under some circumstances.

Some statements that were *not consistent* with the TCPS received more support from nonresearchers than from researchers (to the detriment of research flexibility and freedom of inquiry generally):

- In ethical research, human subjects are never subjected to risks of harm.
- The ethical review process has as one of its aims the purpose of blocking research which does not include collaboration with the research subjects.
- Written consent to participate must be obtained for research to be fully ethical.
- Corporations must approve of the participation of their employees in research conducted by outsiders involving the corporation.
- Research must not be conducted in circumstances where subjects do not know they are being observed, or otherwise cannot give their free and informed consent.

Finally, nonresearchers were more likely to regard the TCPS as the ultimate arbiter of ethical issues: they were more likely to agree that “the TCPS may be regarded by researchers as a source of definitive answers to contentious ethical questions they may face in their research.” This role is explicitly rejected by the TCPS (2005, p. i.3).

## **Research Experience and REBs**

The survey findings suggest why problems arise between researchers and REBs, and changes that might reduce conflict and improve the quality of ethics reviews, in the eyes of social scientists. The survey indicates that *the group with best understanding of the TCPS are published researchers*, especially those with REB experience. In the TCPS’s own terms, the more research-experienced individuals best understood distance education’s “ethical norms and practices” (p. i.9).

It is not clear that the experts’ views are adequately represented, let alone deferred to, on most REBs, however. The problem is engrained in their composition. The TCPS legislates that REBs must comprise members, “at least two [with] broad expertise in the methods of the areas of research that are covered by the REB,” “one member . . . knowledgeable in ethics,” “one member . . . knowledgeable in the relevant law” (suggested, but not required, for nonbiomedical research), and “at least one member who has no affiliation with the institution but is recruited from the community served by the institution” (p. 1.3). The objective is to “ensure the expertise, multidisciplinary and independence essential to competent research ethics review by REBs” (p. i.3), and to avoid “the imposing [of] one disciplinary perspective on others” (p. i.2).

Problems may arise if the expert members of the REB are outnumbered by nonexperts. The potential for this problem is recognized by the TCPS: “The majority of members of an REB should have both the training and the expertise to make sound judgments on the ethics of research

proposals involving human subjects” (p. 1.3). To achieve this objective, the TCPS declares, REBs must assure staff possess “both the training and the expertise to make sound judgments on the ethics of research proposals involving human subjects” (p. 1.3). The policy says nothing about how such balance is to be achieved, however. Based upon the findings of the survey, the answer is that the majority of REB members must be experienced researchers, actively working and publishing in the discipline being assessed.

REBs acknowledging researcher expertise will abide by the following principles:

1. **Experienced researchers sit on REBs, and their judgments are respected.** The survey demonstrated that distance education practitioners who are not active researchers are much more likely to admit they do not have knowledge of the field of ethics, nor of the TCPS; yet, they may be appointed to the REB under current eligibility criteria. It is a strange logic that holds that ignorance or naiveté are qualifications for REB membership. REB members make highly technical judgments, requiring understanding both of the TCPS and of the ethical norms and research practices of various disciplines. These decisions cannot be wisely made by unprepared individuals. The importance of specialized competence is becoming clearer as appreciation for the differences between distance and other forms of research increases (Anderson & Kanuka, 2003). Evans and Jakupiec (1996) argue for the importance of context in evaluating research proposals. The TCPS (2005, p. i.2) itself acknowledges that “sound ethical reasoning” requires scrutiny of contexts, especially of specialized disciplines. The survey indicates that experienced researchers are more capable of appreciating aspects of context, and of the nuances in differences among disciplines.

2. **The norms and practices of different disciplines are respected.** This key notion from the TCPS (2005, p. i.9) attempts to assure that “alien” ethical standards are not inflicted on researchers (Owen, Robert, Burgess, Golfman, & Sykes, 2001). Researchers have complained of policy misinterpretations, and other abuses, from adjudicators not attuned to the expectations of specific disciplines (Gibbs & Gambrell, 2002). Active researchers are more likely, the survey showed, to accept the need to respect unique needs and traditions within disciplines.
3. **The value of anonymity, and subjects' freedom to volunteer, is acknowledged.** Subjects have the right to participate in research, even when reviewers may regard participation as risky, unworthy, unattractive, or unwise. The ethical issues concern whether consent is informed and truly voluntary, and whether the degree of anonymity provided is as promised. Anonymity and confidentiality are versatile tools. The TCPS (2005) states, in the context of a discussion of confidentiality, “If the data being stored are truly anonymous, the research project will need only minimal REB scrutiny” (p. 3.2); in a discussion of secondary use of data, the policy reads, “This issue [secondary use of data] becomes of concern *only* when data can be linked to individuals....” (p. 3.4). “As a general rule,” the TCPS summarizes, “the best protection of the confidentiality of personal information and records will be achieved through anonymity” (p. 3.2).
4. **Freedom of inquiry is preserved.** If the activities of authoritarian REBs inhibit free and open inquiry to too great an extent, only innocuous research will be approved. There is no ethical requirement that research be toothless, bland, void of embarrassing findings, or unchallenging, however (Furedi, 2002). Questions of academic freedom, the balance between society's right to know and personal privacy, and the issue of the public interest over the welfare of individuals (including their privacy), arise here. Without diminishing the importance of any of these complex issues, it is sufficient to point out that a chilling of the research climate in Canada by overzealous REBs, “threaten[ing] free inquiry for no ethical gain” (van den Hoonaard, 2004, p. 10), has not improved the protection of subjects in fields such as the humanities and social sciences, where there has been no evidence of serious ethical risks.
5. **Attention is focused on biomedical and clinical research.** Especially where evidence exists that standards are inadequate or enforcement lax in the protection of subjects or the integrity of results, ethical review should be stringent. Nonexperimental and qualitative approaches should be distinguished from experimental ones, and proportionate review should reflect the potential for identified harms. REBs and ethics policymakers should recognize that it is the biomedical disciplines that are presently “under siege” (Nurse, 2006) for ethical violations. These disciplines need more stringent review mechanisms to recover their credibility and public confidence; research in the social sciences and humanities, including distance education, should not be punished for the transgressions of other disciplines. The uniqueness of distance research. Distance practitioners globally argue that distance research is different in important ways from traditional forms, and thus has different requirements for ethical review. Some types of research may be easier to perform at a distance, both because different tools and approaches are used, and because the interpersonal dynamics between researcher and subject vary at a distance. The tools that the global distance education and training community commonly

uses for interaction also make new forms of effective contact with research subjects possible. Online surveys, participatory and collaborative research models (including culturally and geographically dispersed subjects, and longitudinal studies), iterative projects, and scrutiny of system-generated data are all easier to employ in a distance context than they may be in more traditional research traditions, because technology is involved. In addition to facilitating access and participation (for some participants, though admittedly not for all), the marginal cost of adding additional subjects to technology-based distance research projects may be much less than in traditional face-to-face situations (Kraut, Olson, Banaji, & Bruckman, 2004).

It is also often easier to create and analyze online social networks at a distance, and to capture and scrutinize their interactions. Protections for participants are based upon the greater voluntariness of participation (there is less social pressure online to join a group), the ease with which individuals may withdraw, or refuse to answer or participate (continued "consent" is easier to assure), and the overall anonymity of the medium. At the same time, the presence (and even the participation) of the observer/researcher may be less obtrusive.

Analysis of the results of online interaction may also take advantage of the media and modes of communication employed. Transcripts of the text of online interactions can be assessed using the increasingly sophisticated analytic tools and procedures developed in the past decade for this purpose (Anderson, Rourke, Garrison, & Archer, 2001; Fahy, 2004, 2005; Fahy, Crawford, & Ally, 2001; Garrison, Anderson, & Archer, 2000, 2001; Garrison, Cleveland-Innes, Koole, & Koppelman, 2005; Herring, 1996; Rourke et al., 1999). While the transcript

analysis process is not without difficulties (Fahy, 2001; Rourke et al., 2001), results suggest that analysis of interaction patterns in online communities is ethically accepted, and profitable in terms of insights into social patterns (Fahy, 2002, 2003).

Not unexpectedly, there are also hazards in online research. Fraud and misrepresentation are easier to perpetrate online: identities cannot be readily confirmed; pseudonyms, alter egos, and false identities are common; fraudulent or even malicious research participation can occur; and, even assuming the best will and most conscientious moderator, unintentional misunderstandings may arise.

Furthermore, the media used may themselves be foreign to some participants, or may prove unreliable, uneconomical, or too complex for some of the intended audience. It is also possible for unprincipled researchers to obtain information surreptitiously, or to violate confidentiality or privacy agreements ("administrator access" gives broad powers to the unscrupulous). Credentials or expertise may be misstated, and the contributions of individuals to group products may be misidentified. All of these dangers exist in face-to-face research, too, but they are sometimes exacerbated, and more difficult to detect, in online situations, especially when conducted internationally. Their existence makes commitment to ethical behavior by distance practitioners and researchers all the more vital.

### **Canada Compared with Other Countries on Research Ethics**

The concerns of Canada's distance researchers can be compared, with similarities and differences as follows, in relation to researchers internationally.

## Similarities

- The conviction that integrity in inquiry is one of the foundations of higher education (Bucharest Declaration, 2004; Lane, 2004; Mishra, 1998).
- The conviction that students of research must become “critically competent ... professional communicators” as part of their research training (Savage, 2001).
- Concern for the rights of dependent persons in research situations (Iacono, 2006).
- Desire for clear principles for researchers and practitioners (Crosta, 2004).
- Awareness of the impact of the World Wide Web, and technology generally, on research and researchers (Karmakar, 2002).

## Differences

International researchers seem more concerned that:

- “Nontraditional” students (those in cross-cultural learning situations) are being forced to learn and adopt Western research methods and values (Leach & Oakland, 2007; Robinson-Pant, 2005);
- new, rapidly evolving technologies, combined with a variety of pre-existing unresolved issues, increase economic and organizational stresses on adopting cultures and organizations (Chozos, Lytras, & Pouloudi, 2002);
- harmonious integration of forces for internationalization vs. localization (Yang, 2001), and a cross-cultural perspective on research ethics (Robinson-Pant, 2005; Sikes, 2006), have been slow to occur; and
- there is considerable variation in the attention paid to instruction regarding ethics in different learning environments (Lysaght, Rosenberger, & Kerridge, 2006).

## CONCLUSION

### Implications of findings

Canada's distance researchers believe that ethical inquiry is not necessarily harmed, and indeed may sometimes be facilitated, by psychological, geographical, temporal, and other distances existing between researchers and online subjects. Used properly, some distances may even encourage desirable attributes of research, such as candor, reflection, thoughtfulness, and objectivity. At the same time, it is clear that online researchers everywhere need to be exceptionally skilled communicators, designers of materials, interpreters of their data, and masters of methodology, to overcome the difficulties distance may present to those unfamiliar with its character. Researchers must also be highly flexible, and capable of creating and employing hybrid instruments and approaches, because, in the event of problems or questions, the timely intervention of the researcher is unlikely or impossible.

Recent examination of the behaviors and beliefs of distance practitioners suggest that ethical concerns are not common in the field. Most distance educators do not appear to be concerned about the ethical value of their practices, including their research. By their own admission, most nonpublishing practitioners are not well-informed about the policies under which distance research must be conducted. Nonresearchers freely admit that they do not understand, or have much cause to use, Canada's research policy.

On the other hand, it appears that experienced (published) distance researchers internationally are relatively well-informed about the requirements of ethical research. Like their colleagues in the humanities and social sciences generally, they tend to believe that they are better judges of the ethics of their research than REBs, and they often object to being treated as if their research posed the same risks as found in biomedical and clinical-experimental situations. They believe

that their research should be regarded differently from studies that have been publicly associated with actual harms or malfeasance.

The eventual disposition of these ethics review issues in Canada will be determined in part by the reactions of policymakers to the advice of distance researchers about where vigilance is needed. It is clear that, presently, distance researchers generally do not perceive the same problems, actual or potential, that policymakers have anticipated in development of the TCPS, and in this, Canadian researchers resemble their international colleagues. Active researchers generally believe ethics review should recognize local realities, just as it recognizes other obvious disciplinary differences in methods and procedures. In Canada, our research has shown that distance researchers believe the traditions within which they operate already embody effective standards, including their tools, relationships with subjects (Bogdan & Bilken, 1992), data handling and analysis, reporting processes and methods, design and development, and, most importantly, protection of subjects. Likewise, the literature suggests, researchers worldwide tend to view ethics as a supplement, rather than an addition, to the provisions they already make to safeguard the integrity of their work. The two are in harmony except, as noted earlier, for the priorities developing nations have for creating a distinct, non-Western research culture, an objective, it might be argued, that is not primarily ethical at all. Issues related to “internationalization” and “localization” (Yang, 2001) arise from these priorities.

On another level, however, the concerns of both groups are similar: Both address the need for researchers to have sufficient independence and autonomy to conduct their research without unnecessary encumbrances. Whether barriers are raised unintentionally by existing paradigms and hegemonies, or intentionally by overreaching or poorly trained ethics boards and review processes, the effects are the same: needed, important research may be stymied, and researchers may be muzzled (Taber, 2002).

## **Future Research**

Based on the above findings and analysis, the following directions for future research are suggested.

1. Social science and humanities researchers have complained that they are threatened with the same restraints as their biomedical colleagues, despite the fact that recent urgent research ethics-related scandals have concerned the latter group almost solely (Elliott, 2008). It will be important to determine whether this pattern persists in the future, and whether the restraints imposed by national ethics policies constrain ethical violations among those currently most prone to them.
2. The research reported here suggests that experienced researchers make better judges of the ethical value of proposed research. It also recommends that research experience be a consideration in the composition of REBs and IRBs. Researchers must monitor the behavior and efficacy of research review boards who follow this advice, to determine whether they do indeed produce better assessments of the ethical issues in proposals, and thereby facilitate improved relations with researchers.
3. An overall concern is the freedom of researchers to inquire with minimal hindrance. Future research must determine whether the freedom researchers currently enjoy changes, and, if the freedom to do research is constrained, what the costs and benefits are, to society and to individuals.
4. Finally, distance researchers believe they have advantages over their colleagues who do face-to-face inquiries, because the “strategic” use of the impersonality distance imposes can produce greater candor, more objectivity, and increased social presence (Walther, 1996). Whether these effects can

actually be detected in their work remains to be determined, and would be a potentially important area of inquiry.

## REFERENCES

- Anderson, T., & Kanuka, H. (2003). *E-research: Methods, strategies, and issues*. Boston: Allyn and Bacon.
- Anderson, T., Rourke, L., Garrison, D.R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2), 1-17.
- Beck, M., & Kaufman, G. (1994). Scientific methodology and ethics in university education. *Journal of Chemical Education*, 94(11), 922-924.
- Begley, S. (2002, November 1). Review boards pose threat to social scientists' work. *The Wall Street Journal Online*. Retrieved April 23, 2008, from [http://online.wsj.com/public/article\\_print/0,,SB1036101057183429471,00.html](http://online.wsj.com/public/article_print/0,,SB1036101057183429471,00.html)
- Bogdan, R., & Biklen, S. (1992). *Qualitative research for education* (2<sup>nd</sup> ed.). Toronto, Canada: Allyn and Bacon.
- Bucharest Declaration. (2004). The Bucharest Declaration concerning ethical values and principles for higher education in the Europe region. *Higher Education in Europe*, 29(4), 503-507.
- Centers for Disease Control and Prevention (CDC). (2005). *The Tuskegee timeline*. Retrieved April 23, 2008, from: <http://www.cdc.gov/nchstp/od/tuskegee/time.htm>
- Chozos, P., Lytras, M., & Pouloudi, N. (2002, October 15-19). Ethical issues in the learning: Insights from the application of stakeholder analysis in three e-learning cases. In *Proceedings of the E-learn 2002 World Conference on E-learning in Corporate, Government, Health Care, and Higher Education*. Association for the Advancement of Computing in Education. ERIC Documents: ED 479443.
- Complexity of the IRB process: Some of the things you wanted to know about IRBs but were afraid to ask. (2005). *American Journal of Evaluation*, 26(3), 353-361.
- Costley, C., & Gibbs, P. (2006). Researching others: Care as an ethic for practitioner researchers. *Studies in Higher Education*, 31(1), 89-98.
- Crosta, L. (2004). Beyond the use of new technologies and adult distance courses: An ethical approach. *International Journal on E-Learning*, 3(1), 48-60.
- Dohy, L. (2004, February 29). Clear policy needed for medical research trials. *The Edmonton Journal*, p. E10.
- Elliott, C. (2008, January 7). Guinea-pigging. *The New Yorker*, pp. 36-41.
- Elliott, C., & Lemmens, T. (2005, December 13). Ethics for sale. *Slate*. Retrieved April 23, 2008, from <http://www.slatetv.net/id/2132187/>
- Evans, T., & Jakupec, V. (1996). Research ethics in open and distance education: Context, principles and issues. *Distance Education*, 17(1), 72-94.
- Fahy, P. J. (2001). Addressing some common problems in transcript analysis. *The International Review of Research in Open and Distance Learning*, 1(2). Retrieved April 23, 2008, from <http://www.irrodl.org/content/v1.2/research.html#Fahy>
- Fahy, P. J. (2002). Epistolary and expository interaction patterns in a computer conference transcript. *Journal of Distance Education*, 17(1), 20-35.
- Fahy, P. J. (2003). Indicators of support in online interaction. *International Review of Research in Open and Distance Learning*, 4(1). Retrieved April 23, 2008, from <http://www.irrodl.org/content/v4.1/fahy.html>

- Fahy, P. J. (2004, November 22-24). Use of the Bales model for analysis of small group communications in the analysis of interaction in computer-based asynchronous conferences. In M. Boumedine & S. Ranka (Eds.), *Proceedings of the IASTED International Conference on Knowledge Sharing and Collaborative Engineering*, St. Thomas, U.S. Virgin Islands. Calgary: ACTA Press.
- Fahy, P. J. (2005, March). Two methods for assessing critical thinking in computer-mediated communications (CMC) transcripts. *International Journal of Instructional Technology and Distance Learning*. Retrieved April 23, 2008, from [http://www.itdl.org/Journal/Mar\\_05/article02.htm](http://www.itdl.org/Journal/Mar_05/article02.htm)
- Fahy, P. J., Crawford, G., & Ally, M. (2001). Patterns of interaction in a computer conference transcript. *International Review of Research in Open and Distance Learning*, 2(1). Retrieved April 23, 2008, from <http://www.irrodl.org/content/v2.1/fahy.html>
- Fahy, P. J., & Spencer, B. (2004). Research experience and agreement with selected ethics principles from Canada's Tri-Council Policy Statement—Ethical Conduct for Research Involving Humans. *Journal of Distance Education*, 19(2), 28-58.
- Furedi, F. (2002, January 11). Don't rock the research boat. *The Times Higher Education Supplement* (pp. 20-21). Retrieved April 22, 2008, from: <http://www.thes.co.uk/>
- Gardner, V. (2005). Uncontested terrains: A personal journey through image, (national) identity and ethics. *Research in Drama Education*, 10(2), 175-188.
- Garrison, R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, 2(2), 87-105.
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *The American Journal of Distance Education*, 15(1), 7-23.
- Garrison, D.R., Cleveland-Innes, M., Koole, M., & Kappelman. (2005). Revisiting methodological issues in transcript analysis: Negotiated coding and reliability. *Internet and Higher Education*, 9(2006), 1-8. Retrieved April 23, 2008, from [http://www.elsevier.com/wps/find/journaldescription.cws\\_home/620187/description#description](http://www.elsevier.com/wps/find/journaldescription.cws_home/620187/description#description)
- Gibbs, L., & Gambrill, E. (2002). Evidence-based practice: Counterarguments to objections. *Research on Social Work Practice*, 12(3), 452-476.
- Gordon, W., & Sork, T. (2001). Ethical issues and codes of ethics: Views of adult education practitioners in Canada and the United States. *Adult Education Quarterly*, 51(3), 202-218.
- Herring, S. C. (1996). Two variants of an electronic message schema. In S.C. Herring (Ed.), *Computer-mediated communication* (pp. 81-106). Philadelphia, PA: John Benjamins.
- Husu, J. (2004). A multifocal approach to study pedagogical ethics in school settings. *Scandinavian Journal of Educational Research*, 48(2), 123-140.
- Iacono, T. (2006). Further comments on the researched, researchers and ethics committees: A response. *Journal of Intellectual and Developmental Disability*, 31(3), 189-191.
- Karmakar, N.L. (2002, June 24-29). Online privacy, security and ethical dilemma: A recent study. In *Proceedings of the 14<sup>th</sup> ED-MEDIA 2002 World Conference on Multimedia, Hypermedia and Telecommunications*, Denver. Association for the Advancement of Computing in Education. ERIC Documents: ED477037.
- Kraut, R., Olson, J., Banaji, M., Bruckman, A., Cohen, J., & Couper, M. (2004). Psychological research online: Report of Board of Scientific Affairs' Advisory Group on the conduct of re-

- search on the Internet. *American Psychologist*, 59(2), 105-177.
- Lane, J. F. (2004, March 3-7). Competencies and training needs of financial aid administrators. In *Proceedings of the Academy of Human Resource Development (AHRD) International Research Conference*, Austin, TX (Vol. 1-2, pp. 190-197). ERIC Documents: ED491481.
- Lasica, J.D. (2005). The cost of ethics: Influence peddling in the blogosphere. *AUSC Annenberg Online Journalism Review*. Downloaded April 23, 2008, from <http://www.ojr.org/ojr/stories/050217lasica/>
- Leach, M.M. & Oakland, T. (2007). Ethics standards impacting test development and use: A brief review of 31 ethics codes impacting practices in 35 countries. *International Journal of testing*, 7(1), 71-88.
- Lemonick, M.D. & Goldstein, A. (2002). At your own risk. *Time Magazine*, 159(16), 40-49.
- Lysaght, T., Rosenberger, P.J., & Kerridge, I. (2006). Australian undergraduate biotechnology student attitudes towards the teaching of ethics. *International Journal of Science Education*, 28(10), 1225-1239.
- McNamee, M. (2001). Introduction: Whose ethics, which research? *Journal of Philosophy of Education*, 35(3), 309-327.
- Medical Research Council of Canada. (2005). *Tri-council policy statement [TCPS]: Ethical conduct for research involving humans*. Ottawa: Government of Canada. Retrieved April 23, 2008, from <http://www.pre.ethics.gc.ca/english/policy-statement/policystatement.cfm>
- Mishra, S. (1998). Distance education research: A review of its structure, methodological issues and priority areas. *Indian Journal of Open Learning*, 7(3), 267-282.
- Mugridge, I., & Kaufman, D. (1986). *Distance education in Canada*. London: Croom Helm.
- Munro, M. (2004, February 27). Alberta's ethics board has the toughest requirements in the country. *The Edmonton Journal*, pp. A1, A13.
- Nurse, P. (2006, January 13). U.S. biomedical research under siege. *Cell*, 124, 9-12. Retrieved April 23, 2008, from <http://www.cell.com/content/article/fulltext?uid=PIIS0092867405014613>
- O'Connor, T. (2002). Research ethics. Retrieved April 23, 2008, from <http://faculty.ncwc.edu/toconnor/308/308lect10.htm>
- Owen, M., Robert, L., Burgess, J., Golfman, N., & Sykes, S. (2001). *Report to the Social Sciences and Humanities Research Council of Canada, Implementation of the Tri-Council Policy Statement on Ethics in Human Research (TCPS) (Humanities Project)*. Unpublished paper, Humanities and Social Sciences Federation of Canada.
- Pendlebury, S., & Enslin, P. (2001). Representation, identification and trust: Towards and ethics of educational research. *Journal of Philosophy of Education*, 35(3), 361-370.
- Population, Inc. (2001, April). *Technology Review*, 104(3), 51-55.
- Rigano, D. (2001). Researcher-participant positioning in classroom research. *International Journal of Qualitative Studies in Education*, 16(6), 741-755.
- Robinson-Pant, A. (2005). *Cross-cultural perspectives in educational research. Conducting educational research*. Columbus, OH: Open University press.
- Rourke, L., Anderson, T., Garrison, R., & Archer, W. (1999). Assessing social presence in asynchronous text-based computer conferencing. *Journal of Distance Education*, 14(2), 50-71.

Rourke, L., Anderson, T., Garrison, D.R., & Archer, W. (2001). Methodological issues in the content analysis of computer conference transcripts. *International Journal of International Journal of Artificial Intelligence in Education*, 12, 8-22. Retrieved April 23, 2008, from <http://cbl.leeds.ac.uk/ijaied/>

Savage, G.J. (2001). International technical communication programs and global ethics. In *Proceedings of the 28<sup>th</sup> Annual Conference, Council for Programs in Technical and Scientific Communication: Managing Change and Growth in Technical and Scientific Communication*, Pittsburgh, PA, (pp. 84-85).

Savulescu, J., Chalmers, I., & Blunt, J. (1996). *Are research ethics committees behaving unethically? Some suggestions for improving accountability and performance*. Retrieved April 23, 2008, from <http://www.bmj.com/cgi/content/full/313/7069/1390?ijkey=uMbVZJcQJvX3E>

Sikes, P. (2006). On dodgy ground? Problematics and ethics in educational research. *International Journal of Research and Method in Education*, 29(1), 105-117.

Small, R. (2001). Codes are not enough: What philosophy can contribute to the ethics of educational research. *Journal of Philosophy of Education*, 35(3), 387-406

Taber, K. (2002). "Intense, but it's all worth it in the end." The co-learner's experience of the research process. *British Educational Research Journal*, 28(3), 435-457.

TCPS. (2005). *Tri-council policy statement [TCPS]: Ethical conduct for research involving humans*. See Medical Research Council of Canada.

The logic of privacy. (2007, January 6). *The Economist*, 382(8510), 65-66.

Thompson, J., Baird, P., & Downie, J. (2002). *Report of the committee of inquiry on the case*

*involving Dr. Nancy Olivieri, the Hospital for Sick Children, the University of Toronto, and Apotex Inc.* Downloaded April 23, 2008, from <http://www.caut.ca/en/issues/academicfreedom/olivieriiquiryreport.pdf>

University of Utah. (2005). *Willowbrook Hepatitis studies*. Retrieved April 23, 2008, from [http://www.hum.utah.edu/~bhenham/Research%20Ethics%20Website/INTMDcs\\_Willowbrook.htm](http://www.hum.utah.edu/~bhenham/Research%20Ethics%20Website/INTMDcs_Willowbrook.htm)

Van den Hoonaard, W. (2004). *Giving voice to the spectrum*. Report of the Social Sciences and Humanities Research Ethics Special Working Committee to the Interagency Advisory Panel on Research Ethics. Ottawa, Canada: Author.

Vujakovic, P., & Bullard, J. (2001). The ethics minefield: Issues of responsibility in learning and research. *Journal of Geography in Higher Education*, 25(2), 275-283.

Walther, J.B. (1996). Computer-mediated communication: Impersonal, interpersonal and hyperpersonal interaction. *Communication Research*, 23(1), 3-43.

Yang, S. (2001, March 14-17). Dilemmas of education reform in Taiwan: Internationalization or localization? In *Paper presented at the Annual Meeting of the Comparative and International Education Society*, Washington DC. ERIC Documents: ED 453137.

## **ADDITIONAL READING**

The following is a selective listing of studies and opinion useful to understanding the issues of ethical review of research in education and distance education, in Canada and globally. (The reader should also consider readings in the "references.")

Baser, S. (2006). Ethics and power in community-campus partnerships for research. *Action Research*, 4(1), 9 -21.

- Bryon-miller, M., & Greenwood, D. (2006). A re-examination of the relationship between action research and human subjects review processes. *Action Research, 4*(1), 117-128.
- Clarkeburn, H.M., Downie, J.R., Gray, C., & Matthew, R. G. S. Measuring ethical development in life sciences students: A study using Perry's developmental model. *Studies in Higher Education, 28*(4), 443-456.
- Colvin, J., & Lanigan, J. (2005). Ethical issues and best practice considerations for Internet research. *Journal of Family and Consumer Sciences, 97*(3), 34-39.
- Detardo-bora, K.A. (2004). Action research in a world of positivist-oriented review boards. *Action Research, 2*(3), 237-253.
- Ethical standards and procedures for research with human beings*. World Health Organization (WHO). Retrieved April 23, 2008, from <http://www.who.int/ethics/research/en/>
- Ford, R.C., & Richardson, W.D. (1994). Ethical decision-making: A review of the empirical literature. *Journal of Business Ethics, 13*(3), 205-221.
- Herring, S.C. (2002). Computer-mediated communication on the Internet. *Annual Review of Information Science and Technology (ARIST), 36*, 109-168.
- History of ethics and ethical review of human research in Australia*. Retrieved April 23, 2008, from <http://www.nhmrc.gov.au/ethics/human/ahec/history/>
- Humbarger, M., & DeVaney, S.A. (2005). Ethical values in the classroom: How college students responded. *Journal of Family and Consumer Sciences, 97*(3), 40-47.
- Hutchings, P. (2003). Competing goods: Ethical issues in the scholarship of teaching and learning. *Change, 35*(5), 26-33.
- Jeffers, B.R. (2002). Continuing education in research ethics for the clinical nurse. *Journal of Continuing Education in Nursing, 33*(6), 265-269.
- Lysaght, T., Rosenberger, P.J., & Kerridge, I. (2006). Australian undergraduate biotechnology student attitudes towards the teaching of ethics. *International Journal of Science Education, 28*(10), 1225-1239.
- MacFarlane, B. (2002). Dealing with Dave's dilemmas: Exploring the ethics of pedagogic practice. *Teaching in Higher Education, 7*(2), 167-178.
- McKee, H. (2003). Changing the process of institutional review board compliance. *College Composition and Communication, 54*(3), 488-493.
- Medical Research Council of Canada. (2005). *Tri-council policy statement [TCPS]: Ethical conduct for research involving humans*. Ottawa: Government of Canada. Retrieved April 23, 2008, from <http://www.pre.ethics.gc.ca/english/policystatement/policystatement.cfm>
- New Zealand health and disability ethics committees*. Retrieved April 23, 2008, from <http://www.newhealth.govt.nz/ethicscommittees/>
- Nind, M., Shereen, B., Sheehy, K., Collins, J., & Hall, K. (2004). Methodological challenges in researching inclusive school cultures. *Educational Review, 56*(3), 259-270.
- Olivier, S. (2002). Ethics review of research projects involving human subjects. *Quest, 54*(3), 196-204.
- Pritchard, I.A. (2002). Travelers and trolls: Practitioner research and institutional review boards. *Educational Researcher, 31*(3), 3-3.
- Research ethics review. *The Journal of the Association of Research Ethics Committees*. Retrieved April 23, 2008, from <http://www.research-ethics-review.com/>

Revised ethical guidelines for educational research (2004). *British Educational Research Association*. Retrieved April 23, 2008, from <http://www.bera.ac.uk/publications/guides.php>

Savulescu, J., Chalmers, I., & Blunt, J. (1996). *Are research ethics committees behaving unethically? Some suggestions for improving accountability and performance*. Retrieved April 23, 2008, from <http://www.bmj.com/cgi/content/full/313/7069/1390?ijkey=uMbVZJcQJvX3E>

Swaner, L.E. (2005). Educating for personal and social responsibility: A review of the literature. *Liberal Education*, 91(3), 14-21.

The logic of privacy. (2007, January 6). *The Economist*, 382(8510), 65-66.

Tilley, S.A., Killins, J., & Van Oosten, D. (2005). Connections and tensions between university and school districts: Research review boards and school-based research. *Alberta Journal of Educational Research*, 51(3), 277-293.

Zheng, L., & Hui, S. (2005). Survey of professional ethics of teachers in institutions of higher education: Case study of an institution in central China. *Chinese Education & Society*, 38(5), 88-99.