A framework for ethical educational research: principles and application Theresa Burgess & Francois Cilliers

theresa.burgess@uct.ac.za; francois.cilliers@uct.ac.za

Faculty of Health Sciences, University of Cape Town

Stakeholders who may be a beneficiary of or be at risk in your educational research project

- Individuals
 - o Participants
 - Current or future students
 - Current or future educators
 - Third parties e.g., family of students and educators
- Educational institution
- Practice community beyond the institution
 - Educational
 - Clinical

- Communities served or serviced by the educational institution
- Society more broadly e.g.,
 - Impact on service delivery posttraining
 - Future resources for education
- Researcher
- Research community

PRINCIPLE	APPLICATION
Educational value	 Research should have important educational, research or social applications. Evaluate the importance of the educational problems being researched; and the educational (social) value for each of the potential beneficiaries. Specify the anticipated impact of the research e.g., Personal knowledge/practice Local/shared knowledge/practice Public knowledge/practice Consider how educational value of research can be sustained through dissemination of study findings, maintaining change in educational practice and/or long-term research collaboration.
Scientific validity	 Select an appropriate, rigorous study design and methods to reliably and efficiently address the study objectives and research question. Ensure that research study is feasible within the socioeconomic, political and cultural context. Ensure that all researchers have an appropriate level of competence to conduct the study. Ensure that the study design realises educational value for the beneficiaries of the research.
Ethical oversight	 Ensure independent review of scientific and ethical merit. Research ethics committee should be South African-based and registered. Do not commence research-related activities until the research study has been formally exempted or approved. Obtain ongoing approval, at least annually, throughout the research activity. Retrospective approval of research conducted prior to ethical approval will not be granted. Ensure public accountability



PRINCIPLE	APPLICATION
Fair selection	Selection of participants should be equitable.
of participants	 Scientific objectives should determine inclusion criteria for individual subjects, not vulnerability or privilege. Identify & protect vulnerable participants
	 Ensure that research participants are not unfairly advantaged in any way, as this reciprocally penalises individuals who do not qualify for selection or who declined to participate. Ensure that research does not intrude excessively into students' primary pursuit of gaining knowledge; or educators' primary role of imparting knowledge (burden). Involve partners (students, educators, community representatives) in establishing recruitment processes to facilitate fair selection.
Favourable risk: benefit ratio	 Assess the potential risks and benefits of the research for all stakeholders, and determine whether any risks are reasonable in relation to anticipated benefits. Consider the probability and magnitude of a broad scope of risks What risk?
	 Disadvantage e.g., academic; students who take part in research must not be unfairly advantaged in any way, as this reciprocally penalises students who decline to participate Psychological e.g., anxiety, stress, stigma Social e.g., reputation Financial e.g., loss of earnings, loss of funding Legal Physical
	Conflict of interest
	 As a practitioner-researcher, when do your interests as researcher conflict with either your interests as teacher or students' interests?
Voluntary, informed participation	 Participation in research should be voluntary (individual autonomy) Assess the potential limitations to voluntariness that are often inherent in educational environments. These limitations are often not overt! Develop mechanisms to eliminate power differentials from recruitment processes to ensure fair selection of participants. Ensure there is no undue inducement – coercion, manipulation of choice by others – of participants to take part in research studies. Consider power differentials that arise from your dual role as educator/researcher and which may influence how comfortable participants might feel in declining to take part in research studies. Dependency on authority figures – e.g., for teaching; for marks – should not play a role in participants' decision to participate. The focus of research might also influence power differentials, especially if student behaviour, involvement in course activities & overall performance is the research focus. Plan educational research carefully to minimize or avoid blurring of roles as an educator and a researcher and as far as possible provide explicit separation of educational and research activities. Involve partners (students, educators, community representatives) in the development of recruitment and informed consent processes.



PRINCIPLE	APPLICATION
	 Written informed consent should be sought. Any deviation from a written informed consent process (verbal; telephonic), or requests to waive the requirement for written informed consent must be strongly justified. Provide information and obtain consent in culturally and linguistically appropriate formats. Ensure that participants know they can refuse to take part or withdraw from the study at any time without prejudice or penalty. Emphasise the right to withdraw throughout the research study.
	Is deception justified?
	 Why is deception necessary to conduct the research? How will exploitation of participants be avoided? How will participants be informed / debriefed after the study? How will the confidentiality of data be assured during data storage & processing?
Respect for recruited participants	 Develop an awareness of issues of trust and dependency in educational environments: The inclusion of research on educational activities might lead to a breach in trust. This may negatively impact on a student's ability to depend upon (receive) education, skills & knowledge. Consider issues related to the timing of access to data and the analysis of data: To establish a respectful relationship and to minimise concerns about participation, access to data and the analysis of data should ideally only occur after final course grades have been posted. Ensure that data access and analysis plan is explained to study participants. Develop and implement procedures to protect individual privacy and the confidentiality of data. Ensure good governance and protection of stored data. Provide a strong justification for the potential storage of data for future research purposes. Inform participants and partners (students, colleagues, community representatives) about the research findings.
Provision of appropriate educational interventions or other benefits of social value after research	 This allows all participants to benefit from their contribution to the study. Identify the post-study interventions/benefits before the study commences; or justify why no post-study interventions/benefits will be provided. Develop appropriate post-study interventions/benefits in consultation with partners (students, colleagues, community representatives) to determine sufficient and fair benefits.



PRINCIPLE	APPLICATION
Collaborative partnerships	 Develop partnerships within the educational environment and the communities served or serviced by the educational institution. Involve partners (students, colleagues, community representatives) in sharing responsibilities in the planning & conducting of research. Respect the diversity of values, cultures, traditions, and social practices within the educational environment and surrounding community. Develop the capacity of researchers, partners within the educational environment and the surrounding community.
	 Ensure that participants and communities receive benefits from the conduct and results of research.

References

- 1. Council for International Organisations of Medical Sciences (CIOMS) in collaboration with the World Health Organisation (WHO). International Ethical Guidelines for Biomedical Research Involving Human Subjects. CIOMS/WHO, Geneva. August, 2002.
- 2. Eikelboom, J. I., Ten Cate, O. T. J., Jaarsma, D., Raat, J. A., Schuwirth, L., & van Delden, J. J. (2012). A framework for the ethics review of education research. *Medical Education*, *46*(8), 731-733.
- 3. Emanuel, E. J., Wendler, D., Killen, J., & Grady, C. (2004). What makes clinical research in developing countries ethical? The benchmarks of ethical research. *Journal of Infectious Diseases*, *189*(5), 930-937.
- 4. Kanter, S. L. (2009). Ethical approval for studies involving human participants: academic medicine's new policy. *Academic Medicine*, *84*(2), 149-150.
- 5. World Medical Association (2013). World Medical Association Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. *JAMA*, 310(20), 2191-2194.

