

education, disability studies, rehabilitation etc. However, this, in itself, should not provide justification for researchers to dispense with complexity, for, like life itself, education is also a messy and complex business that is not easily studied or understood. Our business, as education researchers, is ultimately to shed light upon the complexities of educational practice and understanding in order that learning in research may be enhanced.

Mixed methods research combines theoretical and/or technical aspects of quantitative and

Qualitative research in a particular study. We draw positive implications for organizational systems field for clearly writing about mixed research methods in publications.

Few examples exist in the fields of human resource development, distance education, and foreign Language education, of intentionally using the inquiry literature on mixing qualitative and Quantitative methods in one research project. Mixed methods research is characterized as research that contains elements of both qualitative and quantitative approaches (Brewer & Hunter, 1989; Howe, 1988; Miles & Huberman, 1984; Patton, 1990). There is no typical model in the education of disabled children, because any proposition is first defined by a team, in an attempt to understand the child's needs, the family's availability, and the assistance service functioning. In conclusion, disability can always be compensated by the child's capacities within his psychophysical potential.

1.7: Ethics in research:

1.7.1 Prelude

Axiology refers to the ethical issues that need to be considered when planning a research proposal. It considers the philosophical approach to making decisions of value or the right decisions (Finnis, 1980). It involves defining, evaluating and understanding concepts of right and wrong behaviour relating to the research. It considers what value we shall attribute to the different aspects of our research, the participants, the data and the audience to which we shall report the results of our research. Put simply, it addresses the question: What is the nature of ethics or ethical behaviour? In answer to this question, it is important to consider your regard for human values of everyone that will be involved with or participate in your research project. This consideration is facilitated by the following questions.

What values will you live by or be guided by as you conduct your research? What ought to be done to respect all participants' rights? What are the moral issues and characteristics that need to be considered? Which cultural, intercultural and moral issues arise and how will I address them? How shall I secure the goodwill of participants? How shall I conduct the research in a socially just, respectful and peaceful manner? How shall I avoid or minimise risk or harm, whether it be physical, psychological, legal, social, economic or other? (ARC,2015). Answers to these questions are best guided by four criteria of ethical conduct namely, teleology, deontology, morality and fairness (Mill, 1969). Technically, teleology is the theory of morality which postulates that doing what is intrinsically good or desirable, is a moral obligation that should be pursued in every human endeavour. And so, teleology refers to attempts made in research to make sure that the research results in a meaningful outcome that will satisfy as many people as possible. An application of this criterion is facilitated by questions such as, are the methods used in this research pragmatic and do they make common sense? Will the actions undertaken in the research produce more benefits than harm? Am I convinced that the actions that will be taken during the research will be the right ones? Have I considered all possible consequences of this research? Deontology is the understanding that every action that will be undertaken during the research will have its own consequence, intended to benefit participants, the researcher, the scholastic community or the public at large (Scheffler, 1982). It also allows for flexibility to deal with individual participants or observations. The morality criterion refers to the intrinsic moral values that will be upheld during the research. For example, that the researcher will be truthful in their interpretation of the data. Finally, the criterion of fairness draws the researcher's attention to the need to be fair to all research participants and to ensure that their rights are upheld. Implementation of this criterion is guided by questions such as, how fair will my research actions be? Will they treat all research participants in the same way? Will my actions show favouritism and/or discrimination towards any participants? And so in the section on ethical considerations for your higher degree research proposal, you should demonstrate best ethical conduct by showing an understanding of what is right or wrong behaviour as you conduct the research. This consideration is founded on the understanding that all humans have dignity which must be respected, and they have a fundamental human right to make choices which you as a researcher must respect. Implementation of ethical considerations focuses on four principles which you need to uphold when dealing with your participants and data. These principles have the acronym PAPA namely: Privacy, Accuracy, Property, and Accessibility, following Sidgwick, (1907) and Slote, (1985).

1.7.2 Principles

The five main principles of ethics are usually considered to be: (<https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=225&printable=1>):

- Truthfulness and confidentiality
- Autonomy and informed consent
- Beneficence
- Non-maleficence
- Justice.

1.7.3 Research ethics:

An outline of related studies enclaves numerous virtues that provides guidelines for the responsible conduct of research. In addition, it educates and monitors academicians/researchers conducting research to ensure a high ethical standard. The following is a general summary of some ethical principles:

1. **Honesty:** Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data.
2. **Objectivity:** Strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research.
3. **Integrity:** Keep your promises and agreements; act with sincerity; strive for consistency of thought and action.
4. **Carefulness:** Avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities.
5. **Openness:** Share data, results, ideas, tools, resources. Be open to criticism and new ideas.
6. **Respect for Intellectual Property:** Honor patents, copyrights, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission. Give credit where credit is due. Never plagiarize.
7. **Confidentiality:** Protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

8. **Responsible Publication:** Publish in order to advance research and scholarship, not to advance just your own career. Avoid wasteful and duplicative publication.
9. **Responsible Mentoring:** Help to educate, mentor, and advise students. Promote their welfare and allow them to make their own decisions.
10. **Respect for Colleagues:** Respect your colleagues and treat them fairly.
11. **Social Responsibility:** Strive to promote social good and prevent or mitigate social harms through research, public education, and advocacy.
12. **Non-Discrimination:** Avoid discrimination against colleagues or students on the basis of sex, race, ethnicity, or other factors that are not related to their scientific competence and integrity.
13. **Competence:** Maintain and improve your own professional competence and expertise through lifelong education and learning; take steps to promote competence in science as a whole.
14. **Legality:** Know and obey relevant laws and institutional and governmental policies.
15. **Human Subjects Protection:** When conducting research on human subjects, minimize harms and risks and maximize benefits; respect human dignity, privacy, and autonomy.

(<https://libguides.library.cityu.edu.hk/researchmethods/ethics>)

1.7.4 Research Misconducts:

Apart from the plausible ethical issues discussed above, there are certain misconducts plaguing research works and other academic pursuit. They are:

- (a) **Fabrication** - making up data or results and recording or reporting them.
- (b) **Falsification** - manipulating research materials, or changing or omitting data or results such that the research is not accurately represented in the research record.
- (c) **Plagiarism** - the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

N.B: Research misconduct does not include honest error or differences of opinion.

(Source: Definition of Research Misconduct. The Office of Research Integrity, U.S. Department of Health & Human Services)