ETHICAL DIMENSION OF RESEARCH
QUALITY ASSURANCE: PLAGIARISM

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OUTLINE

- What is research and Ethics?
- Why research?
- Research issues and challenges
- Importance of ethics in Research
- Plagiarism
- conclusions
WHAT IS RESEARCH AND ETHICS?

- Research -- An organised and systematised investigation of a phenomenon by using sound methods and procedures in order to find solutions to problems affecting humanity.

- Ethics – Norms of conduct or behaviour that distinguishes right from wrong or acceptable or unacceptable behaviour (e.g. in research)
WHY RESEARCH?

- **General Reasons:**
  - confirm or contest or refute theories or hypothesis
  - develop scientific and professional practice
  - develop creative, analytical and rational thinking for informed decision making
  - find solutions to challenges or problems affecting humanity

- **Personal Reasons:**
  - fulfill learning, domestic and career needs-promotion, tenure, my job, self development
  - Egoistic - visibility, satisfy curiosity

- **Institutional:**
  - Mandate- e.g. mission of a university
  - recognition and visibility – University rankings
  - Justification of existence
AFRICAN RESEARCH ISSUES AND CHALLENGES?

- Research quality assurance - ETHICS
- Resources + Infrastructure
- Leadership + support + funding + structures
- Visibility (publications + IR+ OA+ Conf.+ web presence)
- University rankings
- Collaborations- linkage + (distance + cost + visibility)
- Brain drain /brain gain
- Information access/services- library + internet access

( see also Mutula 2009; Britz 2009) )
AFRICAN RESEARCH ISSUES AND CHALLENGES?

- Promotion/recognition
- Research mesiah – role model/mentorship
- Documentation – local content vs external content-IRs
- Knowledge sharing- links + platforms/opportunities + content + leadership + why partnership
- Supervisors/Researchers
- Mapping and auditing- 5ws and H
- Students
- Curriculum development.
RESEARCH QUALITY/INTEGRITY

- Process – Planning, + Conducting + Reporting + Evaluation
- Management – Standards/policy, planning + organizing + staffing + executing + monitoring + evaluating
- Access and usage – legal issues - intellectual property (copyright + licensing)

  - Pose a significant, important question that can be investigated empirically and that contributes to the knowledge base
  - Test questions that are linked to relevant theory
  - Apply methods that best address the research questions of interest
  - Base research on clear chains of inferential reasoning supported and justified by a complete coverage of the relevant literature
  - Provide the necessary information to reproduce or replicate the study
  - Ensure the study design, methods, and procedures are sufficiently transparent and ensure an independent, balanced, and objective approach to the research

(http://www.ktdrr.org/ktlibrary/articles_pubs/ncddrwork/focus/focus9/Focus9.pdf)
RQ

- Provide sufficient description of the sample, the intervention, and any comparison groups
- Use appropriate and reliable conceptualization and measurement of variables
- Evaluate alternative explanations for any findings
- Assess the possible impact of systematic bias
- Submit research to a peer-review process
- Adhere to quality standards for reporting (i.e., clear, cogent, complete)
WHY RESEARCH ETHICS IMPORTANT?

David Resnick (2011) article “What is ethics in Research and why is it important” (see www.niehs.nih.gov/research/resources/bioethics/whatis) provides an interesting insight.

- Prohibits /prevents
  - Fabrication
  - Falsification
  - Plagiarism

- Promotion of Research Values - trust + accountability + respect + fairness
- Accountability to the public and enable public support
- Moral and social values - human /animal rights, social responsibility,
- Recognition of research codes of conduct – honesty, objectivity, integrity, carefulness, transparency – share, respect for IP, confidentiality, responsible publication, respect for colleagues, social responsibility, avoid discrimination, competence, legality, protection of human and animal
EXAMPLES OF UNETHICAL PRACTICES (RESNICK 2011)

- Publishing the same paper in two different journals without telling the editors
- Submitting the same paper to different journals without telling the editors
- Not informing a collaborator of your intent to file a patent in order to make sure that you are the sole inventor
- Including a colleague as an author on a paper in return for a favor even though the colleague did not make a serious contribution to the paper
- Discussing with your colleagues confidential data from a paper that you are reviewing for a journal
- Trimming outliers from a data set without discussing your reasons in paper
- Using an inappropriate statistical technique in order to enhance the significance of your research
- Bypassing the peer review process and announcing your results through a press conference without giving peers adequate information to review your work
- Conducting a review of the literature that fails to acknowledge the contributions of other people in the field or relevant prior work
- Stretching the truth on a grant application in order to convince reviewers that your project will make a significant contribution to the field
- Stretching the truth on a job application or curriculum vita
- Giving the same research project to two graduate students in order to see who can do it the fastest
- Overworking, neglecting, or exploiting graduate or post-doctoral students
- Failing to keep good research records
- Failing to maintain research data for a reasonable period of time
- Making derogatory comments and personal attacks in your review of author’s submission
- Promising a student a better grade for sexual favors
- Using a racist epithet in the laboratory
PLAGIARISM

- (see Ocholla and Ocholla 2014)
- Plagiarism is widely understood to be the unethical use of other people’s publications, by claiming the content or parts thereof as one’s own, without paying tribute to or recognising the sources from which the information was obtained, either at all or properly.
- “the act of taking another person's writing, conversation, song, or even idea, and passing it off as your own. This includes information from web pages, books, songs, television shows, email messages, interviews, articles, artworks or any other medium” (http://www.lib.usm.edu/legacy/plag/whatisplag.php).
Clarke’s (2006:97) analysis of the definitions and their usage groups them into the following categories:

- **Publication**: the presentation of another person's material, work, or idea. A precondition for plagiarism is that the new work is made available to others.

- **Content**: the presentation of another person's material, work, or idea. A precondition for plagiarism is that some part of the new work is derived from someone else's prior or contemporaneous work.

- **Appropriation**: the presentation of another person's material, work, or idea as one's own. A precondition for plagiarism is that the claim of originality of contribution is either explicit or implied by the manner of presentation; or the presentation may be such that the reader is reasonably likely to infer the work to be an original contribution; and
(4) lack of credit given:

the presentation of another person's material, work, or idea as his or her own, without appropriate attribution. A pre-condition for plagiarism is that the reader is not made aware of the identity of the originator, nor of the location of the original contribution.”
PLAGIARISM - COMPLEXITIES

- ‘competitive plagiarism – academic survival’
- ‘institutionalised plagiarism’ – e.g. speechwriting, bureaucratic, honorary authorship etc.

**Arguments against plagiarism**

- Ethical – Plagiarism is morally wrong
- Instrumentalist – advancement of knowledge permissible! but credit for ideas/source is vital
- Legal – complexities of legal interpretation – theft, fraud, intentional or unintentional; Copyright – fair use or fair dealing

**Counter arguments**

- Practicality to authors and readers – repetition, errors, common knowledge, citations clutter text
- The role of imitation in learning and innovation – imitation has always been important for learning unnecessary restrictions stunt learning and innovation
- Alternative cultural interpretations of plagiarism – oral traditions, non-western traditions, cultural hierarchy etc.
PLAGIARISM – HEIS

Largely occurs unknowingly due to negligence, carelessness, ignorance, arrogance, and apathy among members of the academic community with respect to how to use information resources or other people’s information for teaching, learning, and research, correctly or properly.

Lukashenko, Anohina and Grundspenkis (2007:55) provide three reasons highlighting why plagiarism in higher education is forbidden:

Firstly, this phenomenon is in contradiction to the process of learning which demands from a learner to take certain intellectual and physical efforts in order to acquire knowledge and skills necessary for the further social and professional activity.

Secondly, plagiarism reduces the value of a qualification conferred by the educational institution.

Thirdly, it demotivates other students to work independently and to put efforts to learning in case of impunity of plagiarism.
The absence of a plagiarism policy can be a major drawback in the fight against plagiarism in universities.

A content analysis for this paper based on the policies posted on the Internet by 23 South African universities, and concluded that:

- The majority of the universities have a plagiarism policy.
- Institutional responsibility for the policies vary, but all the universities underline that plagiarism is the responsibility of all the stakeholders.
- All the policies target students and teaching staff,
- Nearly all the policies include infringement penalties, detection software, marketing and publicity, declaration of compliance, and guidelines, including library guides.

However, only a few policies articulated the library's role clearly.
“Timeline of the Open Access Movement” that was initiated by Peter Suber and taken over in 2009 by the Open Access Directory (see http://oad.simmons.edu/oadwiki/Timeline), which captures and shows the enormous growth of the OA movement from past to present.

There is significant contribution to the timeline by libraries, universities, journal publishers, and professional organisations and societies.

The most comprehensive report on OA content on the web is by Directory of Open Access Repositories (DOAR) (http://www.opendoar.org/find.php) and the Open Access Directory (OAD). The figures and table below provide some relevant insights.

“free availability on the public Internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the Internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited” (BOAI 2002. See also IFLA 2003).
Fig 1: Proportion of Repositories by Continent Worldwide

- Europe (1087 = 48%)
- North America (474 = 21%)
- Asia (393 = 17%)
- South America (179 = 8%)
- Africa (64 = 3%)
- Australasia (59 = 3%)
- Caribbean (15 = 1%)
- Central America (10 = 0%)
- [Others (2 = 0%)]

Total = 2283 repositories
Figure 2: Proportion of Open Access Directories by Country in Africa

Рисунок 2: Доля открытого доступа по странам в Африке
<table>
<thead>
<tr>
<th>Repository name</th>
<th>Country</th>
<th>Num. Recs.</th>
<th>Pubs</th>
<th>Confs</th>
<th>Theses</th>
<th>Unpub</th>
<th>Other</th>
<th>Base URL</th>
<th>Software</th>
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<td>OAI</td>
<td>DSpace</td>
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<tr>
<td>Digital Institutional South Africa</td>
<td>South Africa</td>
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<td>[Unknown]</td>
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<td>OAI</td>
<td>EPrints</td>
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<td>University of Pretoria Electronic Theses and Dissertations</td>
<td>South Africa</td>
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<td>ETD-db</td>
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<tr>
<td>University of Zululand Repository</td>
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<td>UPSpace at the University of Pretoria</td>
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<td>17932</td>
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<td>UWC Theses and Dissertations</td>
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<td>OAI</td>
<td>DSpace</td>
</tr>
</tbody>
</table>
Figure 3: Content Types in Open DOAR Repositories in South Africa

<table>
<thead>
<tr>
<th>Content Type</th>
<th>Percentage of Repositories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theses and dissertations</td>
<td>21 = 84%</td>
</tr>
<tr>
<td>Journal articles</td>
<td>16 = 64%</td>
</tr>
<tr>
<td>Conference and workshop papers</td>
<td>10 = 40%</td>
</tr>
<tr>
<td>Unpublished reports and working papers</td>
<td>9 = 36%</td>
</tr>
<tr>
<td>Other special item types</td>
<td>5 = 20%</td>
</tr>
<tr>
<td>Multimedia and audio-visual materials</td>
<td>4 = 16%</td>
</tr>
<tr>
<td>Books, chapters and sections</td>
<td>3 = 12%</td>
</tr>
<tr>
<td>Bibliographic references</td>
<td>1 = 4%</td>
</tr>
<tr>
<td>Datasets</td>
<td>1 = 4%</td>
</tr>
</tbody>
</table>

OpenDOAR 25-May-2013

Total = 25 repositories
Usage of existing OA repositories is beneficial for any plagiarism detection process.

- Search engines such as Google, Yahoo and others provide the largest repository of OA content that is accessible to most people in the world, free of charge, on the Internet.
- Plagiarized information in such content can easily be detected.
  - Brandt et al. (n.d.) notes that:
  - “OA documents are typically hidden from traditional web crawlers in so-called OA repositories” (Brandt et al. n.d.)
  - “generic search engines like Google, Yahoo or Bing do not cover all documents that are available from OA repositories on the Internet [and that] about 21% of the documents provided by OA repositories are not covered by major Internet search engines”.
  - “The usage of existing OA repositories is beneficial for any plagiarism detection process.”
OPEN ACCESS AVERTS PLAGIARISM?

- This question can be answered with both a ‘yes’ and a ‘no’.
- It is difficult and laborious to detect plagiarism in print-only information environments where most documents are not exposed to public eyes for collective scrutiny.
- We argue that open access increases chances of detecting and averting plagiarism.
- Authors take more precautions when publishing research output or posting their publications in an open access platform/space.
- It is also increasingly easy to detect plagiarism by using document resemblance detecting software programs such as such as Turnitin, Docoloc, EduTie, Eve2, CopyCatch, Glatt, Moss, JPlag, wordCHECK.
OPEN ACCESS AVERTS PLAGIARISM? THREE ARGUMENTS

► A1. OA makes it easier for plagiarism to occur (e.g. Abrizah 2009; Brandt et al. n.d). Brandt et al. (n.d) report that: “In nearly all recent examples of copyright violations in scientific, academic and scholarly areas the original source of the plagiarized passages can be found on the Internet.”

► However, detecting such cases has also become much easier to do precisely because of the internet.
OA AVERTS PLAGIARISM? THREE ARGUMENTS, CONT.

A2. OA averts or prevents plagiarism, or makes the detection of plagiarism much easier.

- (Brandt et al. n.d.) recognise that: “Freely available documents, however, bear the risk that they may easily be used by third persons without paying attention to the copyright of the original authors.... Nevertheless, the unrestricted accessibility of OA publications is their main advantage, especially with regard to copyright protection.

- Due to their free availability, OA documents are also well-suited for automatic plagiarism search services.”

- Internet-based resources, such as OA based-resources, make the detection of plagiarism much easier.

- Purdy (2005:276) explains that: “Plagiarism detection services that rely on the Internet allow instructors to search for this visual proof, to test their students’ papers to determine if they include language copied directly from other sources.”

- Legality of remote servers
A3. OA both increases and thwarts plagiarism. This is the compromising argument:

“If plagiarism is easier to commit because of the Internet, it is also easier to catch because of the Internet” (Purdy 2005:276).
WHAT IS THE ROLE OF STAKEHOLDERS IN ENSURING ENABLING RESEARCH ETHICS?

Stakeholders are the individuals or organisations involved with or affected by an activity or an occurrence.

- Libraries
- Higher Education Institutions’ administration
- Students
- Staff/faculty, in particular academic/teaching/research
LIBRARIES

Libraries should:

- Provide access and support
- Digitize print collections and develop collections for Open Access
- Provide enabling infrastructure;
- Offer digital and Open Access literacy;
- develop institutional repositories;
- Network with stakeholders;
- Provide copyright and intellectual property literacy;
- Provide leadership for OA, plagiarism, research integrity
- Involve relevant stakeholders to succeed.
OTHERS

- **Authors/researchers** publish to be read, and are important for Open Access and averting plagiarism.

- Sound alarm, conform to copyright conventions, launch and support OA and plagiarism initiatives and publications, and deposit publications in Open Access spaces.

- **Lecturers/Faculties/Academics** interact with publications on a regular basis in their capacity as educators/instructors/authors and assessors/examiners/moderators of students and colleagues’ academic and research output. They can detect, prevent, condemn and discourage plagiarism.

- **Students** are vital as well. They need to develop critical thinking and their own/original views about what they learn. They also need to learn how to avoid plagiarism by participating in plagiarism workshops which are available to them at their respective universities/colleges and comply with institutional plagiarism policies.
CONCLUSION

- Research ethics and plagiarism policy is essential
  - Implementation
  - Monitoring
  - Evaluation

- OA can avert, prevent or decrease plagiarism. We note more studies supporting this view or argument from PDS developers and providers whose work is made considerably easier and more effective when records are accessible in full text on the Internet in OA space.

- The compromising third argument is “If plagiarism is easier to commit because of the Internet, it is also easier to catch because of the Internet.”
CONCLUSION

- Thirdly, Internet based OA documents (such as ETDs, including retrospectively digitized print theses, online conference proceedings, etc.) provide growing opportunities for plagiarism awareness, detection, and prevention if documents are accessible in full text format.

- Stakeholders should also work together and rather focus more on awareness, education and training to prevent plagiarism, as in our view most plagiarism in HEIs occurs because of ignorance and apathy, largely among students.

- Lastly, plagiarism detection software tools are highly useful and helpful in OA document environments. They play a major role in the detection of plagiarism if used wisely.

- But the wisdom of using them is curtailed if full text records are only scrutinized by one or a few individuals, and not made available to the greater public.
Thank you!