

RESEARCH ETHICS

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ETHICS

- Ethics is knowing the difference between
what you have a right to do

And

what is right to do.

Potter Stewart



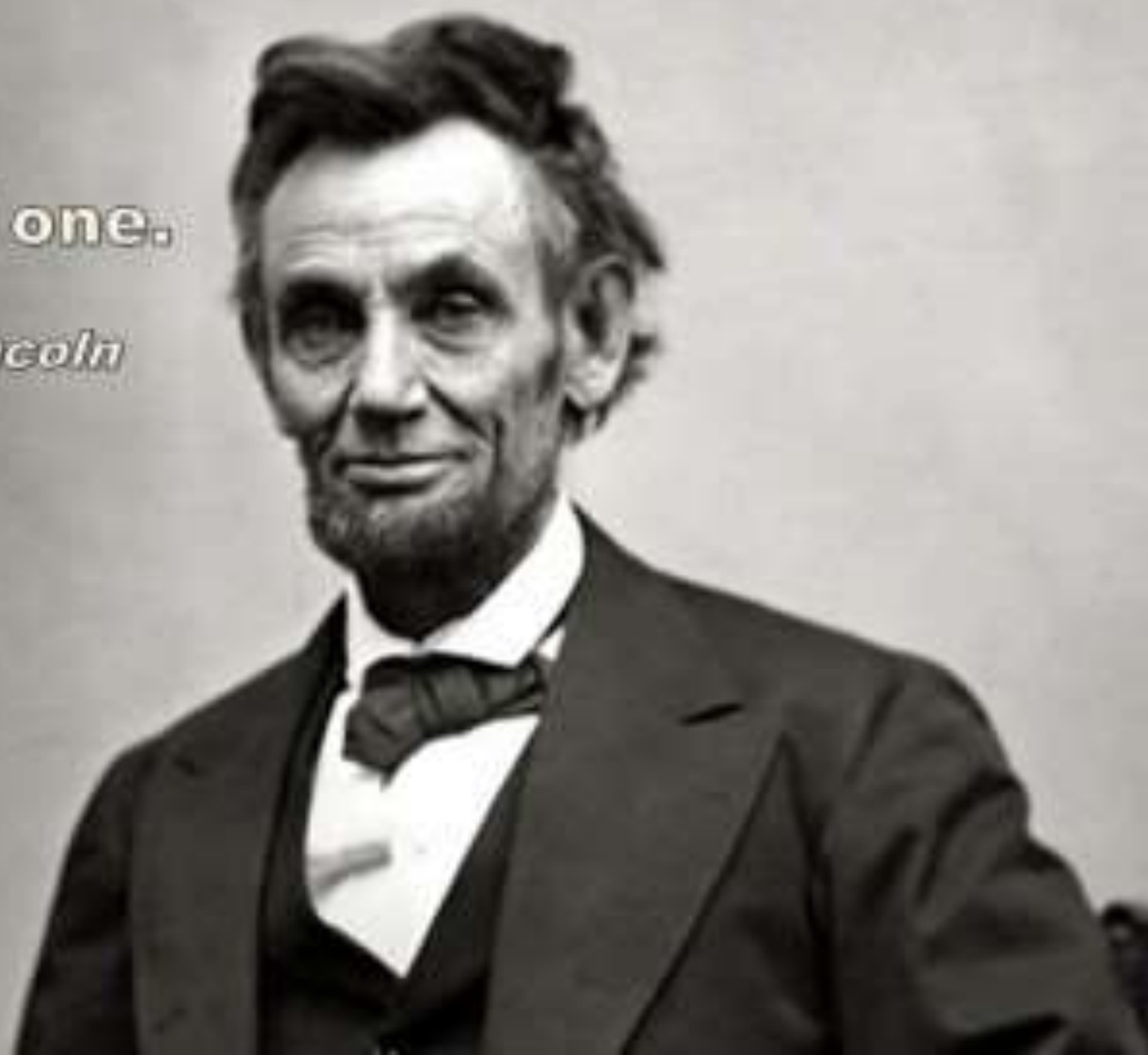
CURRENT RESEARCH ENVIRONMENT

- Academic/research institutions reward those with the longest CVs and the most publications.
- Under pressure to generate voluminous output, scientists often fall prey to misconduct.



Whatever
you are,
be a good one.

-Abraham Lincoln



RESEARCHERS ARE REQUIRED TO REPORT

- Study methods
- Participant recruitment
- Data collection
- Data management
- Analysis
- Allow for adequate peer review
- Replication and validation of research findings
- Evaluation of the quality
- Research sponsorship
- Name of the organization conducting the survey
- Dates of the study
- Exact wording of the survey questions



PARTICIPANT RELATED

- Safety
- Confidentiality
- Privacy
- Respect
- Informed Consent
- Certificate of confidentiality
- Pictures, videos, personal information



RESEARCH MISCONDUCT HISTORY

- Tuskegee Syphilis Study (1932-1972), Alabama
- The Nuremberg Code
- The Belmont Report; respect for persons, beneficence, and justice
- Declaration of Helsinki.



RELEVANCE TOO ISLAMIC ETHICS

- NIYAAT
- JHOOT.
- DHOKA DAHI
- KISSI KA HAQ MARNA
- ADL O INSAAAF
- RAWA DARI
- MILAAWAT SE PERHAIZ



MISCONDUCT

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



WHO DID WHAT AND WHY?

- Authors
- Contributors
- Competing interests



WHY DOES AUTHORSHIP MATTER?

- Authorship is about credit and responsibility
- Academic life **credit** revolves around publication
- Publication brings **fame**
- **Research evaluation** is based on publication
- **Grants** depend on publication



WHY DOES AUTHORSHIP MATTER?

- In some parts you need publications to get a job
- You may have a disease named after you - for example, Crohn's disease
- Authorship means you are accountable; who is the author of a fraudulent paper?
- Authors can be sued



AUTHORSHIP/CONTRIBUTOR SHIP

WHO IS AN AUTHOR?

- *TITLE: A totally blind haphazard study on the effectiveness of medical writing workshops on brain stem and stem cells*
- Professor Najam sethi, *CHANCELLOR of the university*. Raised the grant, got permission for the study
- Professor xyz, Suggested the idea for the trial before departing for a six month leave with pay to MURREE



AUTHORSHIP/CONTRIBUTOR SHIP

WHO IS AN AUTHOR?

- Dr Mastana, *senior lecturer in the department*. Drew up the protocol, wrote the grant proposal, and then died in mysterious circumstances.
- Sir Hamid mir, *visiting consultant*. Allowed his staff to be entered haphazardly into the study
- Dr Salim chootoo, *senior registrar*. Ran the study, collected the data and sent them to the statistician, arranged for the writing up of the study, and negotiated with the editors



AUTHORSHIP/CONTRIBUTOR SHIP

WHO IS AN AUTHOR?

- Saleem, the *statistician*. Did all the analysis, prepared the tables
- Tallat hussain, *editorial adviser*. Wrote the paper
- Professor Ansar abbasi, *director of the Advanced Institute of International Medical sciences*. Allowed his name to be added to the paper in exchange for a lucrative consultancy. Unfortunately didn't have time to read the paper.



CRITERIA FOR AUTHORSHIP OF THE INTERNATIONAL COMMITTEE OF MEDICAL JOURNAL EDITORS

Authorship should be based only on a substantial contribution to:

- Conception and design or analysis and interpretation of data
- Drafting the article or revising it critically for important intellectual content *and*
- Final approval of the version to be published.



AVOID!!!!

- GUEST AND GIFT AUTHORS
- GHOST WRITERS



WHAT ARE THE PROBLEMS WITH AUTHORSHIP?

- Basic problems of credit and accountability
- Many authors on papers do not meet ICMJE criteria
- People don't know about the criteria of authorship
- People think that the definition is unworkable



COMPETING INTERESTS

- A person has a competing interest when he or she has an attribute that is *invisible* to the reader or editor but which *may* affect his or her judgment
- Always declare a competing interest, particularly one that would embarrass you if it came out afterwards



COMPETING INTEREST

WHY DOES IT MATTER?

- Because it may have a profound effect on somebody's judgement.
- Because of the perception that a person's judgement may be affected whether it is or not



PROBLEMS WITH CONFLICT OF INTEREST

- Should it be just financial or personal, academic, political, religious, anything?
- People don't declare it because
 - a) it implies wickedness
 - b) they are confident that their judgement is not affected



COMPETING INTEREST: EVIDENCE THAT IT MATTERS

Views of authors with financial relationships with the pharmaceutical industry on whether calcium-channel antagonists are safe

Manufacturer	Supportive N = 24	Neutral N=15	Critical N=30	P value for trend
Calcium channel antagonist	96	60	37	<0.001
Competing product	88	53	37	<0.001
Any	100	67	43	<0.001

Two thirds of authors contacted had a financial conflict of interest, but the conflict was declared in only 2 of 70 articles.

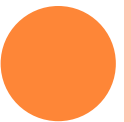


THE DISHONEST DRUG TRIAL

- Not transparent
- Sponsors' roles
- Competing interests
- Compares intervention with one known to be inferior
 - with ineffective dose of competitor intervention
 - with so much of competitor intervention that ADRs likely
- Uses multiple endpoints
- Reports selectively
- Reports results only from favourable centres
- Reports only favourable subgroup analyses
- Presents only most impressive results



Plagiarism: What is it?



PLAGIARISM IN THE SCIENCES

Using the ideas or words of another person
without giving appropriate credit
(**plagiarism**)

From National Academy of Sciences (U.S.), & NetLibrary, Inc. (1995). *On being a scientist: responsible conduct in research*. Washington, D.C.: National Academy Press, p.16.



TYPES OF PLAGIARISM

- **Stealing** - If you take a sentence, or even a unique turn of phrase, and pass it off as your own.
- **Patch working** - Using words and phrases from a source text (that may or may not be acknowledged), and patching them together into new sentences.
- **Insufficient Paraphrasing** - Taking an author's words and changing them slightly, without quoting the actual text is plagiarism.



- **Misquoting** - When you quote another author, always be sure to quote *exactly* what was said.
- **Duplicating Publications** - You can not reuse/recycle your own paper for use in another assignment without *explicit* permission from the instructor. If you cite your previous works, remember to cite yourself!
- **Redundant publication**
- **Salami / dicing publication**



SCENARIOS

- I combined the findings of these 8 sources into one paragraph. I don't have to cite them, because **I created the compilation.**
- I submitted the same paper to more than one class. It's OK that I copied my own work without citing it because it's still *my* idea.
- I copied someone else's work, but I didn't use quotation marks because I changed a few words.



AND.....

- I removed some data points to make my results look better.
- I didn't collect enough data from my experiment so I used a computer program to generate data points.
- My advisor used my data without giving me credit.
- I quoted something but changed one word to strengthen its support of my argument.



COMMON MISTAKES

- Cut & paste from electronic/Internet sources without using quotes or properly citing the source
- Download audio, visual, or arts without proper permission (Copyright issues)
- Cite statistics/facts without the source, unless they are common knowledge



IS IT PLAGIARISM OR IS IT CULTURAL?

- ‘In some Asian cultures, students are taught to memorize and copy well-respected authors and leaders in their societies to show intelligence and good judgment in writing.’ (Thompson, L. C., & Williams, P. G. (1995). Plagiarism in the ESL classroom. *Clearing House*, 69(1), 27-29)
- ‘What is defined as plagiarism by American standards is not defined as such by many Asian or European standards, in which... Taking ideas and words from different books and writers to build an answer seems to be an accepted academic practice.’ (Pennycook, A. (1996). Borrowing others' words: Text, ownership, memory, and plagiarism. *TESOL Quarterly*, 30(2), 201-230)
- ‘In India, for example, undergraduates are not expected to cite sources and it is only at the graduate level where such activity is expected, but not necessary.’ (Handa, N., & Power, C. (2005). Land and discover! A case study investigating the cultural context of plagiarism. *Journal of University Teaching and Learning Practice*, 2(3), 64-84. Retrieved from <http://ro.uow.edu.au/jutlp/vol2/iss3/8>)

BASIC GUIDELINES TO AVOID PLAGIARISM

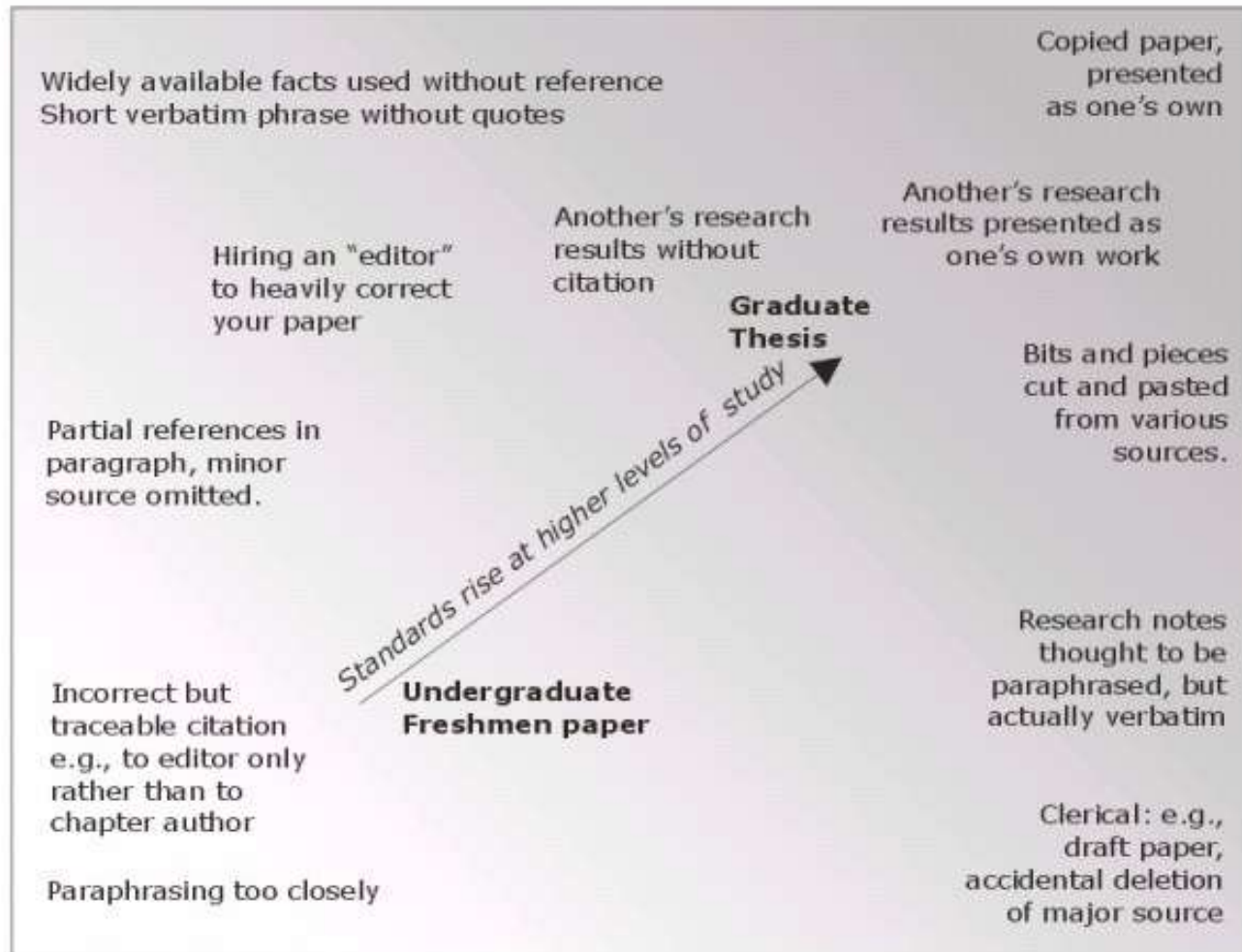
- Even if you don't use words verbatim, you must cite if you use the author's ideas
- If you reference a scientific concept that is not commonly known, cite the source
- You do not need to cite if you are using universally understood concepts or common knowledge
- When in doubt, CITE

Adapted in part from PLAGIARISM. What is it?
<http://bahealthsci.phhp.ufl.edu/tools/PLAGIARISM.ppt>



Knowingly,
Purposeful

Possibly
Accidental



Less Serious

More Serious

[HTTP://WWW.NEIU.EDU/~EJHOWENS/PLAGIARISM/PLAGIARISM.JPG](http://www.neiu.edu/~ejhowens/plagiarism/plagiarism.jpg)
(ACCESSED 21 AUGUST 2009)

WHAT DOES PLAGIARISM LOOK LIKE?

- **NY Times, April 26, 1987: New Zealanders thrive on U.S. sheep shearing (original)**
‘With a heave, John Burt pulled the sheep on its back and pinned it between his legs. Then, reaching for his clippers, he went to work.’
- **Gazette, June 6, 2009: It's time for Colorado's sheep to get a trim (plagiarized sentences)**
‘With a little persuasion, Bob Schroth pulled the sheep onto its back and pinned it between his legs. Then, reaching for his clippers, he went to work.’

<http://www.gazette.com/articles/gazette-58112-stories-four.html>



This the president of Jacksonville State University William Meehan's dissertation. Portions highlighted in yellow are copied verbatim from Carl Boening's dissertation.



JSU and UA say that this is not plagiarism.

If this isn't plagiarism...

What does plagiarism look like?

What does plagiarism look like?

Jamil dissertation.
Highlights are copied verbatim from Saleem's dissertation.





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18 February 2011 Last updated at 08:42 ET



German 'plagiarism' minister Guttenberg drops doctorate

German Defence Minister Karl-Theodor zu Guttenberg has temporarily renounced his doctorate title following accusations of plagiarism.

German media allege several passages of his 2006 thesis were lifted from other people's work.

The minister strongly denied the claims. He said there were undoubtedly mistakes and he was unhappy about them.

Chancellor Angela Merkel had offered to support him if he explained his actions and apologised, reports say.

But her chief spokesman Steffen Seibert made no comment on the defence minister's statement at a Berlin news conference, prompting journalists to walk out.

"I will temporarily, I repeat temporarily, give up my doctoral title," Mr zu Guttenberg told reporters in his statement minutes earlier.

"My dissertation is not a work of plagiarism and I completely reject all such accusations," he said.



The defence minister was in Afghanistan on an unannounced visit as further accusations emerged

Related Stories

German minister denies plagiarism

German navy 'mutiny' investigated

Merkel meets German Afghan troops

German defense minister accused of plagiarism. Individual resigned position - 01 March 2011.

BBC News Europe

<http://www.bbc.co.uk/news/world-europe-12504347> (18

CAUGHT RED HANDED



- Duplication earns German HIV researchers a retraction, and a 3-year publishing ban. In "cell biology"
- A group of cancer researchers in China has lost their 2013 paper in the *International Journal of Clinical and Experimental Pathology* after someone tipped off the journal that the **data were copied**
- A team of physicists has lost their 2013 paper in the *Journal of Optics* after the publisher learned that the article had already **appeared in print twice before**
- Shigeaki Kato, the former University of Tokyo endocrinology researcher found to have **manipulated images in dozens of papers, has six more retractions, bringing his total to 23**



GOOD PUBLICATION PRACTICE

- Read “Guidelines on good publication practice” from the Committee on Publication Ethics (COPE)
- All aspects of publication ethics and, in particular, how to handle cases of research and publication misconduct.
- <http://publicationethics.org/case/potential-plagiarism>



BMJ: RESOURCES FOR AUTHORS

- ❑ Full-text resources providing tools for authors
- ❑ <http://www.bmj.com/about-bmj/resources-authors>



PLAGIARISM RESOURCES

- Duke University Libraries: Citing Sources and Avoiding Plagiarism

<http://library.duke.edu/research/plagiarism/>

- DePauw University: Avoiding Plagiarism

<http://www.depauw.edu/admin/arc/w-center/plag.asp>



PLAGIARISM RESOURCES

- University of California/Davis: Avoiding Plagiarism

<http://sja.ucdavis.edu/files/plagiarism.pdf>

- University of North Carolina/Chapel Hill: Plagiarism

<http://www.unc.edu/depts/wcweb/handouts/plagiarism.html>

- Indiana University: How to Recognize Plagiarism

<https://www.indiana.edu/~istd/>



ONLINE TOOLS FOR PLAGIARISM

CROSS CHECK:

Searches for overlapping content

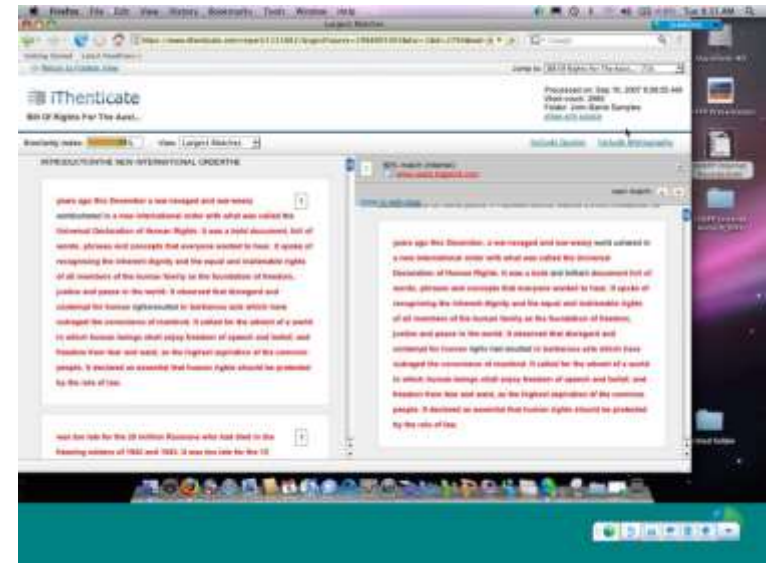
Pre publication

Post publication

iThenticate:

specialist search engine

uses “text fingerprinting” and “string matching”



Cross Ref database

gets behind access controls to search >9 billion articles



ACADIA UNIVERSITY: TUTORIAL

‘YOU QUOTE IT, YOU NOTE IT!’

- ❑ Site is a 10 minute tutorial that covers the principal components of plagiarism
- ❑ Includes yes/no questions that the participant answers
- ❑ <http://library.acadiau.ca/tutorials/plagiarism/>



Six ethics of life

Before you Pray - Believe
Before you speak - Listen
Before you spend - Earn
Before you write - Think
Before you Quit- try
Before you Die - Live.

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AND BEFORE YOU ASK QUESTIONS
RUNNNNN

THANK YOU

