

Paraphrase and Plagiarism: Appropriate Source Use in Science Writing

BIO152H

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Text for “Source Use” Exercises

Demicheli V, Rivetti A, Debalini MG, Di Pietrantonj C. Vaccines for measles, mumps and rubella in children. *Cochrane Database of Systematic Reviews* 2012, Issue 2. Art. No.: CD004407.

1. Is this plagiarism, OK, or incorrect use of the source?

Original:

Association between MMR immunisation and occurrence of encephalopathies was investigated in three studies: one case-control study (Ray 2006) and two self controlled case series studies (Makela 2002; Ward 2007). The case-control study of Ray (2006) tested if hospitalisations due to encephalopathy, Reyes syndrome or encephalitis (Table 6) occurring in children aged zero to six years could be linked to MMR vaccine administration.

Student's Use of the Source:

This paper will investigate the association between MMR immunisation and the occurrence of encephalopathies. In particular, it will report on whether hospitalisations related to encephalopathy, Reyes syndrome or encephalitis in children less than six years old can be related to MMR vaccine administration.¹

- **A = Plagiarism**
- **B = OK**
- **C = Incorrect use of the source**

2. Is this plagiarism, OK, or incorrect use of the source?

Original:

Makela (2002) was based on a surveillance study by the National Public Health Institute that began after the introduction of MMR vaccination in Finland for children aged 14 to 18 months and six years (1982). . . . Trial authors stated that no hospitalisation excess for encephalitis or encephalopathy was observed during the three months post-immunisation ($P = 0.28$).

Student's Use of the Source:

Current scholarship demonstrates that no hospitalization excess for encephalitis or encephalopathy occurs within three months of being immunized [1].

- **A = Plagiarism**
- **B = OK**
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Plagiarism: A Serious Crime?



3 Key Terms (with thanks to “OWL Purdue”)

Quotation

- Identical to the original, using specific words in quotation marks
- Every word matches the source document
- Attribute to the original source

Paraphrase

- Put a passage from the source material into your own words
- Usually shorter than the original source, take a somewhat broader passage from the source and condensing it
- Attribute to the original source

Summary

- Put the main point(s) in your own words, include only the main point(s)
- Significantly shorter than the original; a very broad overview of the source
- Attribute to the original source

Paraphrase

- Your rendition of essential information and ideas expressed by someone else, presented in a new form
- One legitimate way (when accompanied by accurate documentation) to borrow from a source
- A more detailed restatement than a summary

- With thanks to “OWL Purdue” for this definition

How to Paraphrase

1. Re-read the original passage until you understand its full meaning
2. Set the original aside, and write/type your paraphrase on a piece of paper
 - Don't worry if you didn't get exact numbers right, you can add them later
3. Write a few words below your paraphrase to remind you later how you think you'll use the material
4. Check your rendition with the original to make sure that your version accurately expresses all the essential information in a new form
5. Rewrite it again without looking at the original
 - Change as many words as possible
6. Use quotation marks to identify any unique term or phrase you borrowed exactly from the source
7. Record the source (including the page) in your notes so that you can credit it easily if necessary

3 Reasons to Paraphrases

1. Forces you to critically read and develop a full and deep understanding of the source material
2. Helps you develop your own vocabulary
3. Allows you to participate in the scholarly conversation with your own voice, without requiring you to contribute something completely new

Paraphrase Sample 1

Original

Effectiveness against measles was investigated in three cohort studies (Marin 2006; Marolla 1998; Ong 2007). One cohort study (Marolla 1998) evaluated the effectiveness of MMR vaccination in preventing clinical cases of measles in children aged 18 to 90 months from several local health agencies in Rome, Italy (n =2745). Vaccination was performed with three different commercial MMR vaccines, two containing both Schwarz strain (Pluserix and Morupar) and one other prepared with Edmonston-Zagreb strain (Triviraten). Vaccines effectiveness was calculated by using the following formula $[1 - (\text{measles incidence among vaccinated} / \text{measles incidence among unvaccinated}) \times 100]$. Effectiveness (one dose) was estimated to be 97% (95% confidence interval (CI) 88 to 99) in the Morupar study arm, whereas no measles cases were found among Pluserix recipients. Effectiveness was comparably high (95%; 95% CI 90 to 98) when Triviraten was administered.

Paraphrase

Demicheli, Rivetti, and Di Pietrantoj have investigated effectiveness against measles. They evaluated the efficacy of MMR vaccination in preventing clinical cases of measles in kids between the ages of 18 to 90 months from a number of local health agencies in Rome, Italy. They observed that vaccination was performed with three different commercial MMR vaccines, two of which contained the Schwarz strain (Pluserix and Morupar) and one of which contained the Edmonston-Zagreb strain (Triviraten). The vaccines' efficacy was calculated by using a complex formula. They determined that effectiveness was approximately 97% in the Morupar study arm, whereas it was 100% in Pluserix recipients. Effectiveness was about 95% with Triviraten.

Paraphrase Sample 2

Original

Effectiveness against measles was investigated in three cohort studies (Marin 2006; Marolla 1998; Ong 2007). One cohort study (Marolla 1998) evaluated the effectiveness of MMR vaccination in preventing clinical cases of measles in children aged 18 to 90 months from several local health agencies in Rome, Italy (n =2745). Vaccination was performed with three different commercial MMR vaccines, two containing both Schwarz strain (Pluserix and Morupar) and one other prepared with Edmonston-Zagreb strain (Triviraten). Vaccines effectiveness was calculated by using the following formula $[1 - (\text{measles incidence among vaccinated} / \text{measles incidence among unvaccinated}) \times 100]$. Effectiveness (one dose) was estimated to be 97% (95% confidence interval (CI) 88 to 99) in the Morupar study arm, whereas no measles cases were found among Pluserix recipients. Effectiveness was comparably high (95%; 95% CI 90 to 98) when Triviraten was administered.

Paraphrase

Demicheli, Rivetti, and Di Pietrantoj report on a cohort study⁸ that assessed the efficacy of MMR vaccinations against measles in 2745 children between the ages of 18 and 90 months. Three different vaccines were administered, two with the Schwarz strain (Pluserix and Morupar) and one with the Edmonston-Zagreb strain (Triviraten). Calculating effectiveness as $[1 - (\text{measles incidence among vaccinated} / \text{measles incidence among unvaccinated}) \times 100]$, the study found Pluserix was 100% effective, while Morupar was 97% and Triviraten was 95%.⁹

University of Toronto “Code of Behaviour on Academic Matters”

The screenshot shows the University of Toronto website. At the top left is the University of Toronto logo and name. To the right is the 'Office of the Governing Council' logo. Further right are links for 'Portal', 'ROSI', 'Contacts', 'Maps', and 'A-Z Index'. Below these is a search bar and font size controls (-A, A, A+). A navigation menu contains 'Governing Council', 'Appeals, Discipline and Faculty Grievances', 'Convocation', and 'Ombudsperson'. Below the menu is a 'Presidential Search' link. A breadcrumb trail is highlighted with a red box: '> Governing Council Home > Policies > Code of Behaviour on Academic Matters'. On the left side, there is a vertical list of navigation links: 'Governing Council', 'Appeals, Discipline and Faculty Grievances', 'Convocation', 'Ombudsperson', and 'Presidential Search'. The main content area displays the title 'Code of Behaviour on Academic Matters' and the University of Toronto logo.

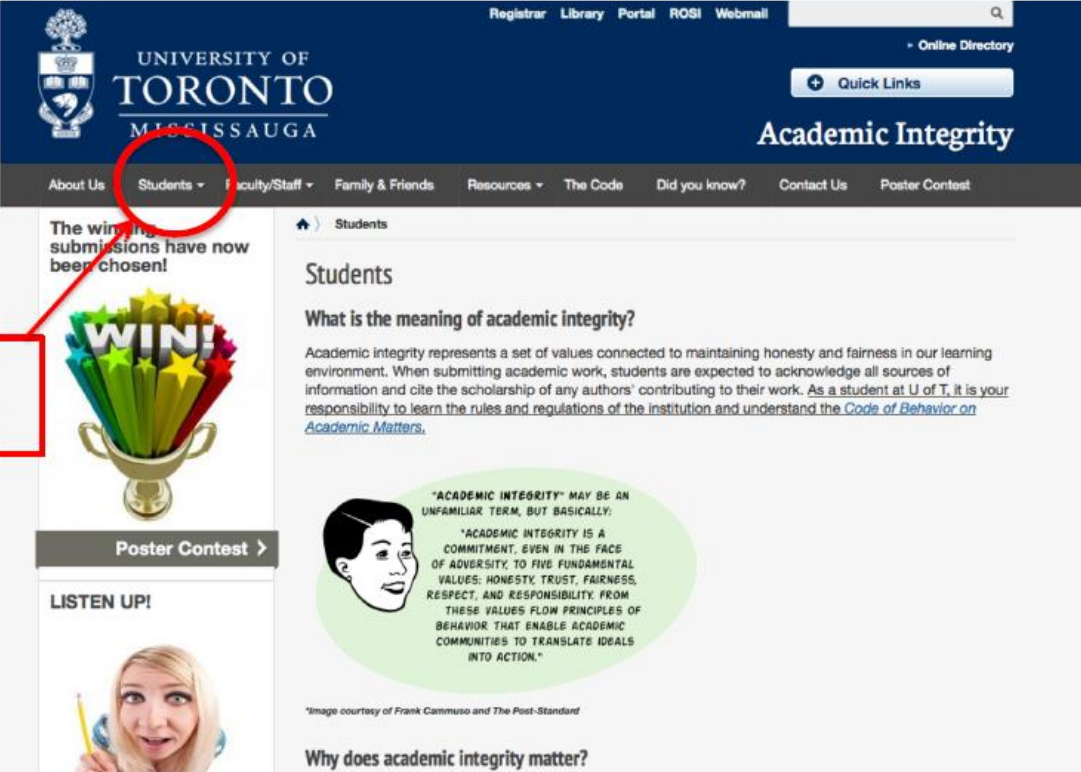
NOTE: “Wherever in this Code an offence is described as depending on "knowing", the offence shall likewise be deemed to have been committed if the person **ought reasonably to have known.**”

The Code in Other Words

- Ignorance is no excuse
- Accidental plagiarism is as serious as an offence as intentional plagiarism

A Good Source of Information

<http://www.utm.utoronto.ca/academic-integrity/students>



The screenshot shows the University of Toronto Mississauga Academic Integrity website. The top navigation bar includes links for Registrar, Library, Portal, ROSI, and Webmail. The main header features the university logo and the text "UNIVERSITY OF TORONTO MISSISSAUGA" and "Academic Integrity". A "Quick Links" button is also present. The main navigation menu includes "About Us", "Students", "Faculty/Staff", "Family & Friends", "Resources", "The Code", "Did you know?", "Contact Us", and "Poster Contest". The "Students" link is circled in red. A red box with a white background and a red border contains the text "Click on 'Students' link" with a red arrow pointing to the "Students" link. The main content area is titled "Students" and includes a section "What is the meaning of academic integrity?" with a definition and a quote. The quote reads: "ACADEMIC INTEGRITY" MAY BE AN UNFAMILIAR TERM, BUT BASICALLY: "ACADEMIC INTEGRITY IS A COMMITMENT, EVEN IN THE FACE OF ADVERSITY, TO FIVE FUNDAMENTAL VALUES: HONESTY, TRUST, FAIRNESS, RESPECT, AND RESPONSIBILITY. FROM THESE VALUES FLOW PRINCIPLES OF BEHAVIOR THAT ENABLE ACADEMIC COMMUNITIES TO TRANSLATE IDEALS INTO ACTION." The quote is attributed to Frank Cammuso and The Post-Standard. Below the quote is a section titled "Why does academic integrity matter?" and a "Poster Contest" section with a "LISTEN UP!" heading and a photo of a woman holding a pencil.

Click on "Students" link

Why is Plagiarism Taken Seriously?

- It denies the mutuality and interdependence which are the heart of scholarship
- It prevents students from developing their own writing and research (and many other related) skills
- In short, you can't write effectively and contribute to the scholarly conversation unless you know how to paraphrase properly and avoid plagiarism

1. Is the following considered plagiarism?

You include a short passage from an essay you wrote this year in an essay you write next year.

- A. Yes, this is plagiarism
- B. No, this is not plagiarism

2. Is the following considered plagiarism?

You get a friend to proofread your essay for this class. Your friend identifies a number of areas you need to improve, fixes some grammar mistakes, changes a few words and phrases, improves some of the vocabulary, but does change the argument or basic structure of the essay.

- A. Yes, this is plagiarism
- B. No, this is not plagiarism

7 Different Kinds of Plagiarism

1. Paper-mill plagiarism

- Submitting work prepared by a third-party

2. Collusion

- Submitting work created in part by someone else

3. Self-plagiarism

- Re-submitting work written for another assignment

4. Failure to quote

- Quoting or repeating someone else's words without acknowledging the source (includes "apt phrases")

7 Different Kinds of Plagiarism con't

5. Paraphrase plagiarism

- Translating someone else's words into your own but retaining the argument without acknowledging the source

6. Patch-writing

- Taking words or phrases and patching them together into new sentences without acknowledging which words appear in another source
- Word switching

7. Concealing sources

- Using an idea or line of argument without acknowledging the source

Penalties for Academic Offences

- Very unpleasant discussions with your instructor, the department chair, and/or the dean, possibly with lawyers involved
- A big waste of time, energy, and emotion for everyone involved
- Significant damage to your self-esteem and reputation
- 0 on the assignment (for smaller assignments)
- Reduction in final grade
- 0 for final grade
- Denial of use of university facilities
- Record of offense on your transcript
- Suspension
- Expulsion
- Retroactive cancellation of degree

Remember that you cannot drop the course while an academic integrity investigation is going on—you can't run away!

7 Tips to Avoid Plagiarism

- 1. Budget your time so that you are not scrambling at the last minute**
2. Paraphrase and summarize
3. Remind yourself that research and analysis are actually discussion and dialogue
 - You are part of the scholarly conversation
4. Write in stages, do multiple revisions
5. Make your topic as specific as possible
6. Print out electronic sources, where possible
7. Model your writing (use of sources) on a recent article published in your field (ask your professor for a recommendation)

3. Is this plagiarism, OK, or incorrect use of the source?

Original

Currently, this is the only review covering both effectiveness and safety issues of MMR vaccines. . . . The study of Wakefield (Wakefield 1998), linking MMR vaccination with autism, has been recently fully retracted (The Editors of The Lancet 2010) as Dr. Wakefield has been found guilty of ethical, medical and scientific misconduct in the publication of the paper; many other authors have more- over demonstrated that his data were fraudulent (Flaherty 2011). A formal retraction of the interpretation that there was a causal link between MMR vaccine and autism has already been issued in year 2004 by 10 out of the 12 original co-authors (Murch 2004).

Student's use of source

The only published study of both the effectiveness and safety of MMR vaccines notes that high profile research presenting a causal relationship between MMR vaccine and autism has been retracted [1].

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4. Is this plagiarism, OK, or incorrect use of the source?

Original

The study of Wakefield (Wakefield 1998), linking MMR vaccination with autism, has been recently fully retracted (The Editors of The Lancet 2010) as Dr. Wakefield has been found guilty of ethical, medical and scientific misconduct in the publication of the paper; many other authors have moreover demonstrated that his data were fraudulent (Flaherty 2011). A formal retraction of the interpretation that there was a causal link between MMR vaccine and autism has already been issued in year 2004 by 10 out of the 12 original co-authors (Murch 2004).

Student's Use of Source

For example, the famous Wakefield study¹⁴ connecting MMR vaccination with autism has been recently fully retracted,¹⁵ and the author has been found guilty of ethical, medical and scientific misconduct. Furthermore, many authors have demonstrated that his data were fraudulent.¹⁶

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- **B = OK**
- **C = Incorrect use of the source**

5. Is this plagiarism, OK, or incorrect use of the source?

Original

The study of Wakefield (Wakefield 1998), linking MMR vaccination with autism, has been recently fully retracted (The Editors of The Lancet 2010) as Dr. Wakefield has been found guilty of ethical, medical and scientific misconduct in the publication of the paper; many other authors have moreover demonstrated that his data were fraudulent (Flaherty 2011). A formal retraction of the interpretation that there was a causal link between MMR vaccine and autism has already been issued in year 2004 by 10 out of the 12 original co-authors (Murch 2004). At that time (1998) an excessive and unjustified media coverage of this small study had disastrous consequences (Flaherty 2011; Hilton 2007; Offit 2003; Smith 2008), such as distrust of public health vaccination programmes, suspicion about vaccine safety, with a consequential significant decrease in MMR-vaccine coverage and re-emergence of measles in the UK.

Student's Use of Source

It can be argued that the current distrust of public health vaccination programmes and much of the suspicion about vaccine safety is the result of the Wakefield study.¹⁰ Many researchers believe that the return of measles in the UK is the ultimate consequence of Wakefield's research.

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- **B = OK**
- **C = Incorrect use of the source**

6. Is this plagiarism, OK, or incorrect use of the source?

Original

There are some weaknesses in our review... We were unable to include a majority of the retrieved studies because a comparable, clearly-defined control group or risk period was not available. The exclusion may be a limitation of our review or may reflect a more fundamental methodological dilemma: how to carry out meaningful studies in the absence of a representative population not exposed to a vaccine that is universally used in public health programmes. Whichever view is chosen, we believe that meaningful inferences from individual studies lacking a non-exposed control group are difficult to make.

Student's Use of Source

Research into the relationship between the MMR vaccine and autism has some weaknesses. For example, many recent studies suffer from a fundamental methodological dilemma: they are lacking a non-exposed control group. In other words, it is difficult to conduct research when there is "not a representative population not exposed to a vaccine that is universally used in public health programmes."¹⁷

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7. Is this plagiarism, OK, or incorrect use of the source?

Original

There are some weaknesses in our review... We were unable to include a majority of the retrieved studies because a comparable, clearly-defined control group or risk period was not available. The exclusion may be a limitation of our review or may reflect a more fundamental methodological dilemma: how to carry out meaningful studies in the absence of a representative population not exposed to a vaccine that is universally used in public health programmes. Whichever view is chosen, we believe that meaningful inferences from individual studies lacking a non-exposed control group are difficult to make.

Student's Use of Source

A recent meta-study of research on the relationship between the MMR vaccine and autism admits to some methodological challenges, the most important of which is the fact that many studies lack a control group that has not been exposed to the vaccine.²²

- **A = Plagiarism**
- **B = OK**
- **C = Incorrect use of the source**

Turnitin.com



Screenshot of Turnitin.com 1

Overall Similarity Index: 57% [exclude quoted](#) [exclude bibliography](#) mode: show highest matches together

called seeds that are placed directly into

the cancer. Brachytherapy may be used as the only form of radiation therapy or may be combined with external beam radiation. Most of the time radiation is used 10

as an added measure after surgery, but it can be used before surgery and may be the main treatment

in some instances, especially in people whose general health is too poor to undergo surgery. When used after surgery, the radiation 8

is called, adjuvant (additional) radiation therapy. This is done to kill any cancer cells that remained after

surgery. Radiation therapy can also be used to ease symptoms of sarcoma when it 8

has spread.

Side effects of radiation therapy may include mild skin problems and fatigue. These often go away after a short while. Radiation may also make the side effects of chemotherapy worse. Abdominal radiation therapy may cause nausea and 7

- 1 13% match (internet) <http://www.cancer.org>
- 2 9% match (internet from 22/06/06) <http://ads.mayoclinic.com>
- 3 6% match (internet from 02/08/06) <http://www.nhlbi.nih.gov>
- 4 5% match (internet from 10/04/03) <http://news.biocompare.com>
- 5 4% match (internet) <http://our.cancer.org>
- 6 4% match (internet from 28/01/04) <http://www.orthoglobe.com>
- 7 3% match (internet) <http://www.americaonhealth.com>
- 8 3% match (internet from 04/11/03) <http://documents.cancer.org>
- 9 1% match (internet from 06/11/02)

Screenshot of Turnitin.com 2

Overall Similarity Index: 47% [exclude quoted](#) [exclude bibliography](#) mode: **show highest matches together**

occurs actively and often in adult tissues, especially rapidly dividing cells such as blood cells. A case in Boston revealed a kind of natural stem cell therapy provided to a mother by her fetus long after it was born. Due to a profound lack of medical intervention, this therapy seems natural enough and is unlikely to be morally suspect,

unless perhaps it were given

to patients who would not naturally receive it. 3

Although one promising technology, blighted ovum utilisation, uses fertilised but developmentally bankrupt eggs, it is argued that utilisation of unfertilised eggs to derive totipotent stem cells obviates the moral debate over when life begins. There are two existing technologies that fulfil this criterion: somatic cell nuclear transfer and parthenogenic stem cell derivation. Although these technologies are far from therapeutic, concerns over the morality of embryonic stem cell derivation should not hinder their advancement. 3

[11] References
1. Stem cells--a clinical update: Tuch B (2006) 2.

Stem Cells and Tissue Engineering: Past, Present, and 8

1 9% match (internet from 04/12/06) <http://en.wikipedia.org>

2 9% match (student papers from 14/12/06) [Submitted to De Montfort University](#)

3 9% match (publications) [Patel P. "A natural stem cell therapy? How novel findings and biotechnology clarify the ethics of stem cell re". Journal of Medical Ethics. April 2006 issue](#)

4 3% match (internet from 24/11/06) <http://www.theherald.co.uk>

5 3% match (internet from 29/09/06) <http://www.sciencedaily.com>

6 2% match (student papers from 22/12/06) [Submitted to De Montfort University](#)

7 2% match (internet) <http://circres.ahajournals.org>

8 1% match (student papers from 14/12/06) [Submitted to University of Westminster](#)