

# PLAGIARISM AND SIMILARITY IN SCIENTIFIC WRITING: HOW TO DIFFERENTIATE AND AVOID IT?



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# ETHICS IN SCIENTIFIC WRITING





# BASIC ETHICAL PRINCIPLES

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## Basic Ethical Principles:

Respect for Individuals

Individual autonomy

Protection of individual benefits

Maximize benefits and minimize harms

Unbiased

Always Acknowledge

The Belmont Report

# ETHICS IN RESEARCH

## What Makes Good Research?

Good  
Science

- Problem selection
- SMART objectives
- Proper methodology
- Proper analysis

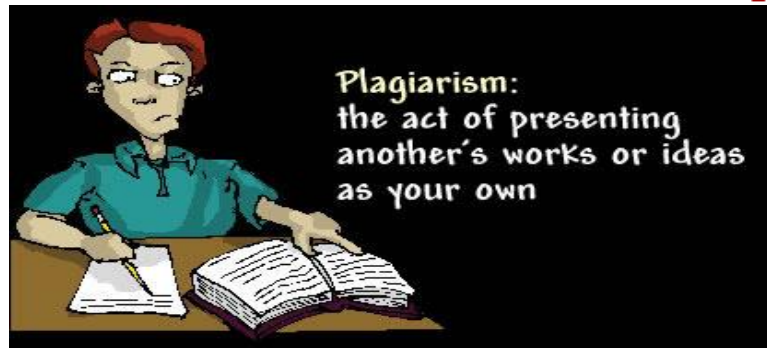
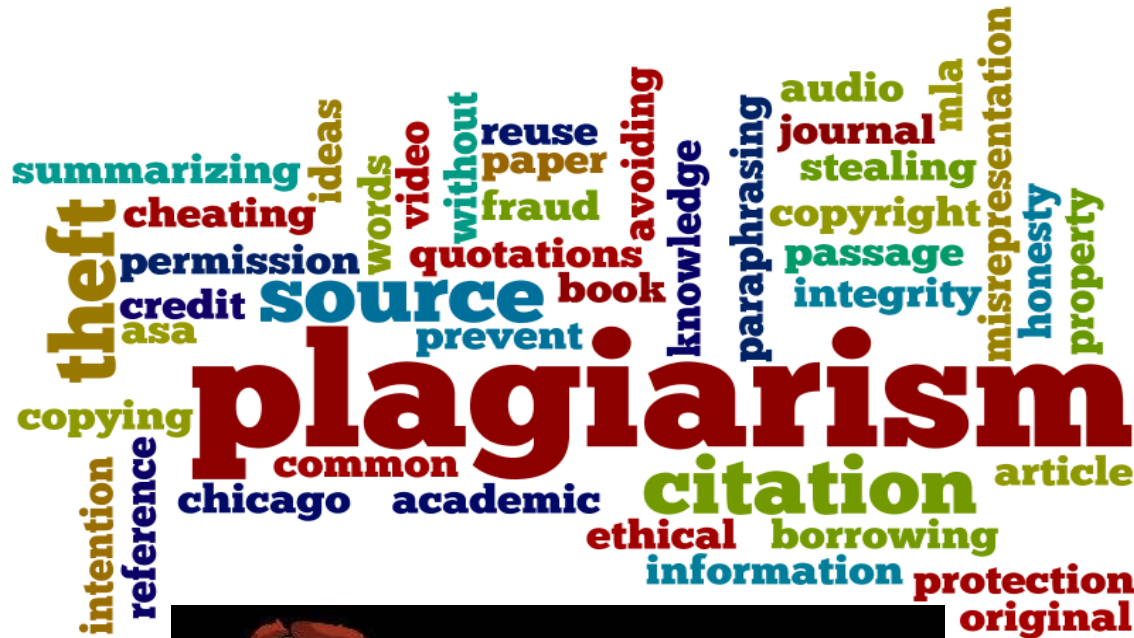
Good  
Ethics

- Fair subject selection
- Favorable Risk-Benefit Ratio
- Independent Review
- Informed Consent

# ETHICS IN RESEARCH



# PLAGIARISM



Plagiarism:  
the act of presenting  
another's works or ideas  
as your own



# PLAGIARISM

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**Stealing Intellectual Property**



# PLAGIARISM



The term plagiarism derived from Latin **word**  
*plagium, meaning kidnapping*

It literary means

theft, taking material authored by  
others and presenting as someone

Using another's exact words without proper  
citation

Presenting another's original thoughts or ideas  
as your own

It can be unintentional and intentional





# PLAGIARISM



## Plagiarism:

Using someone else's words or thoughts without proper referencing

Plagiarism is **stealing**

Plagiarism is **lying**

Plagiarism is **cheating**

One will get caught.....eventually



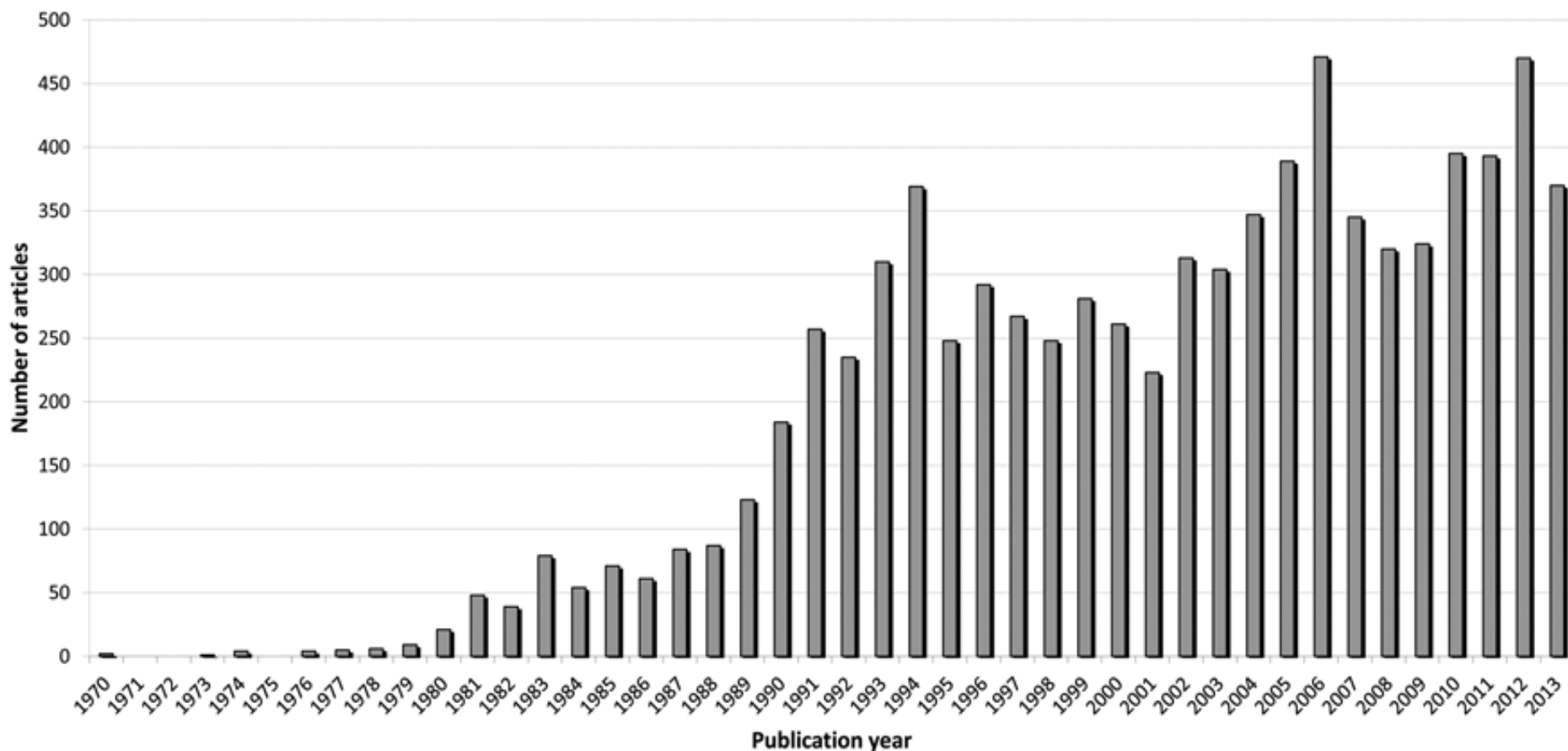
## WHY PLAGIARISE?

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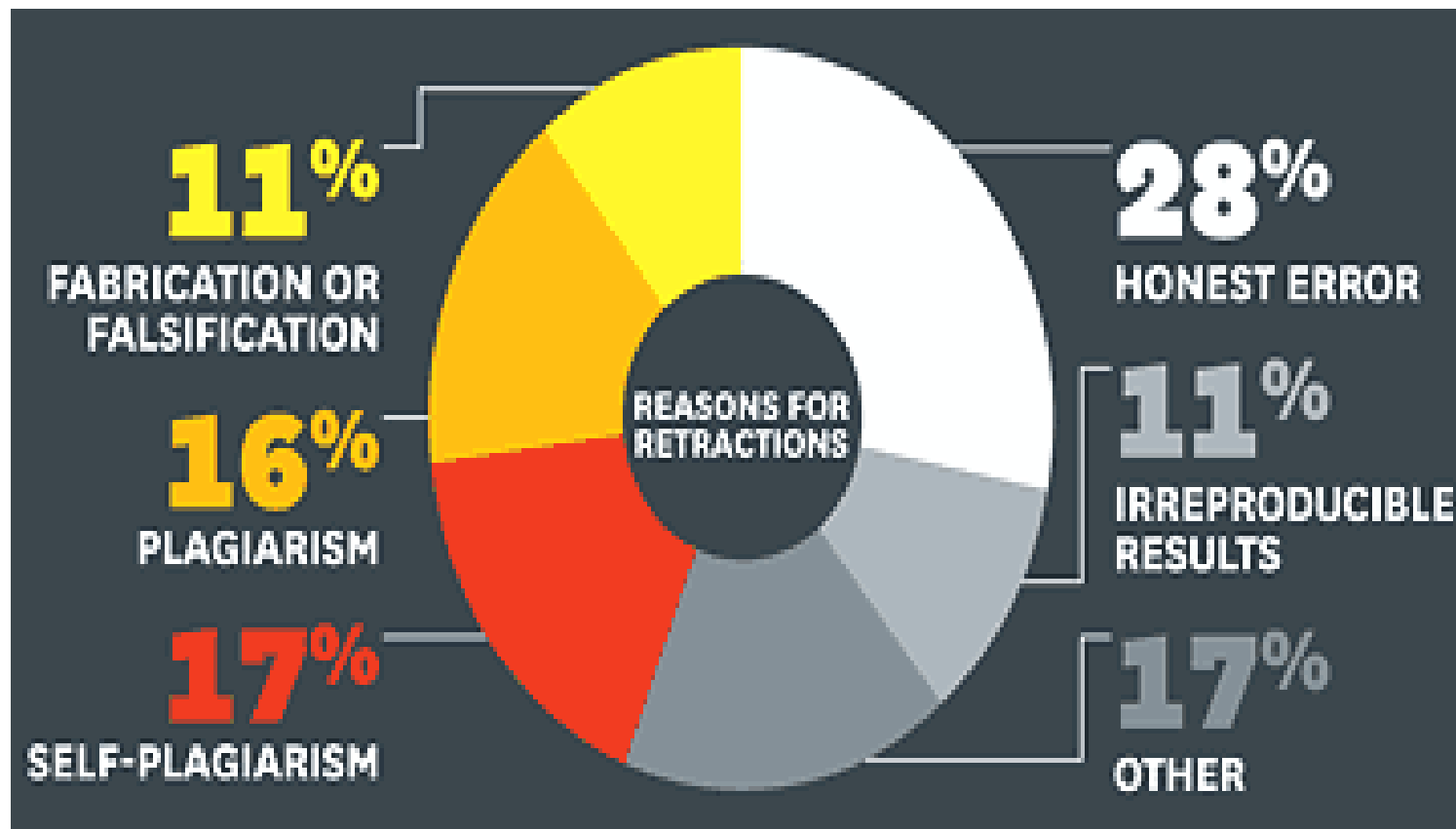
- Poor research skills
- Poor time management
- Poor knowledge or ability to write assignments and/or research papers
- Problems of writing in a second language
- Poor citation skills
- Poor guidance
- Poor knowledge of what constitutes plagiarism or academic integrity
- Over-emphasis on promotions
- Publish or Perish

# PLAGIARISM

Numbers of articles referring to scientific misconduct



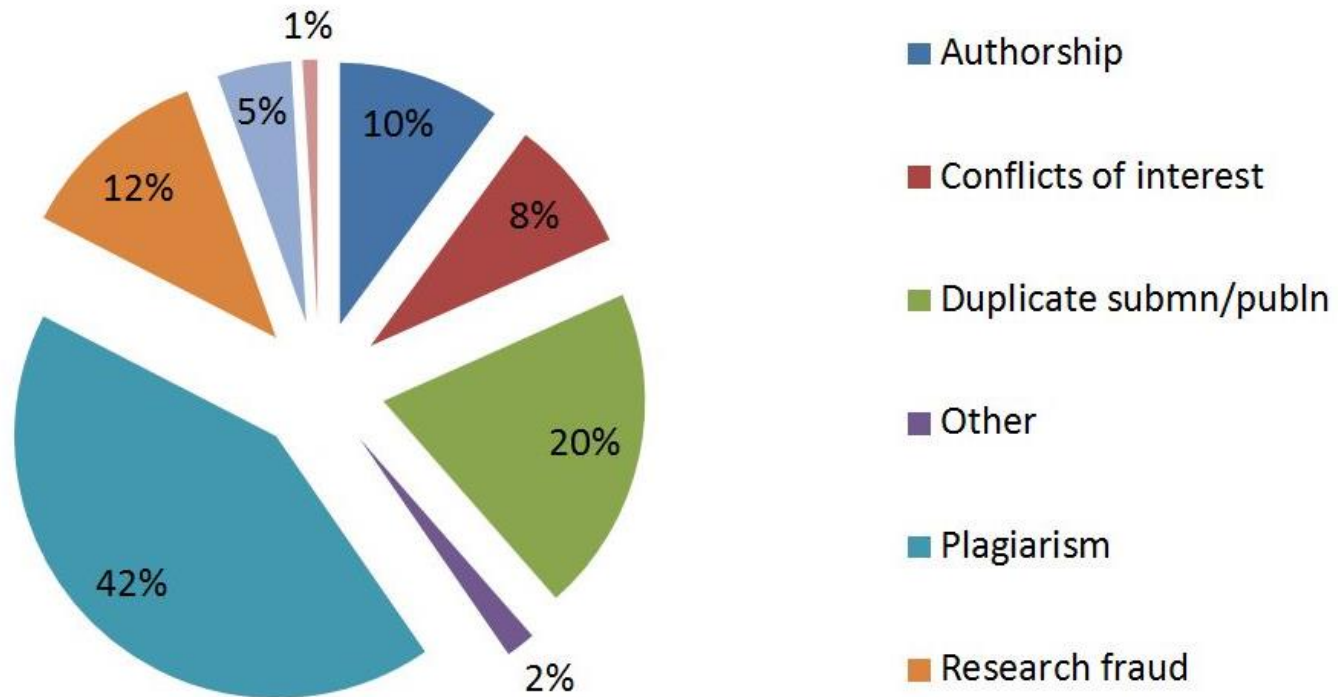
# PLAGIARISM



# PLAGIARISM

## Types of cases reported at Elsevier

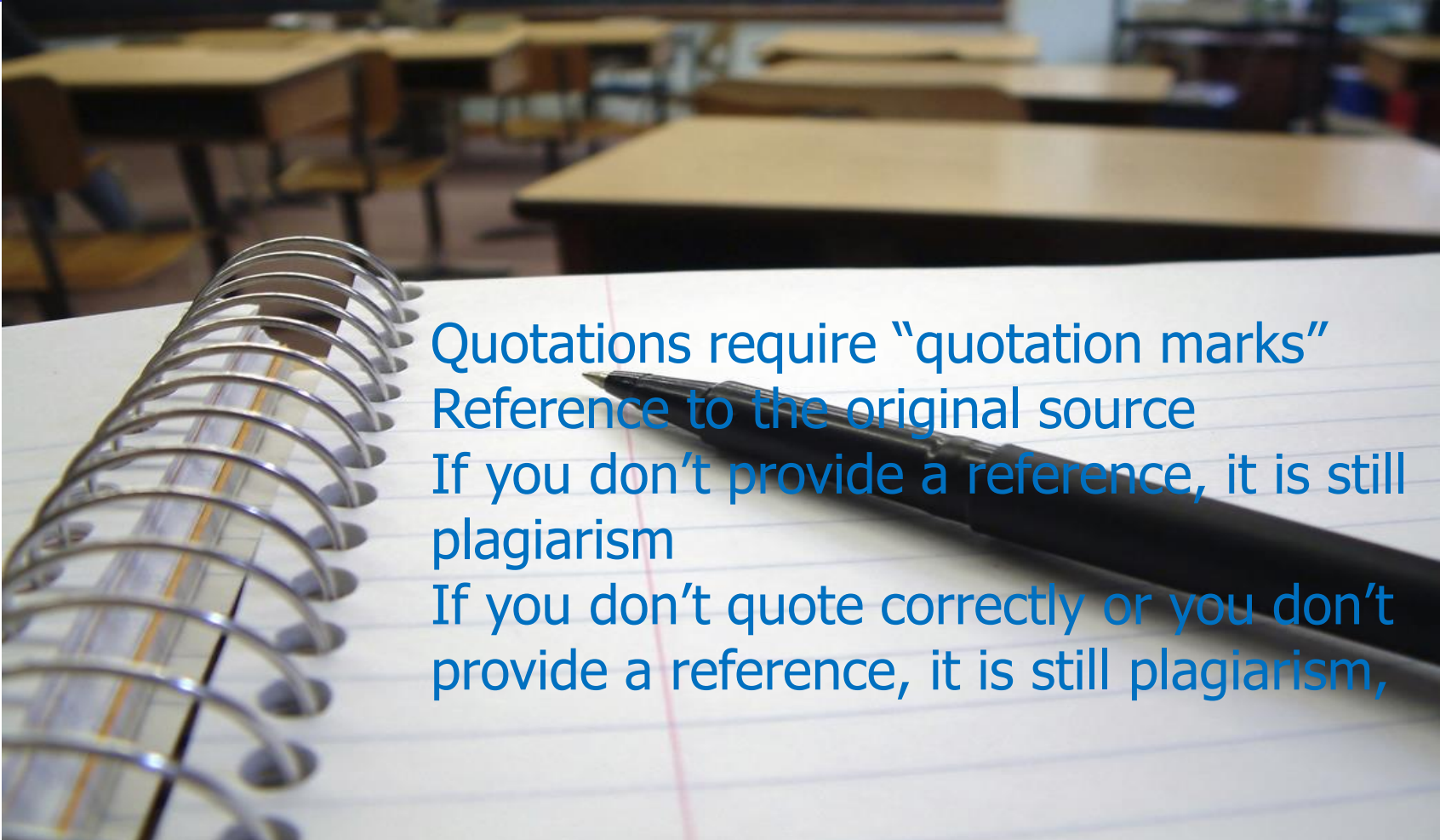
(source: STM Publishers, 2012)





# PLAGIARISM

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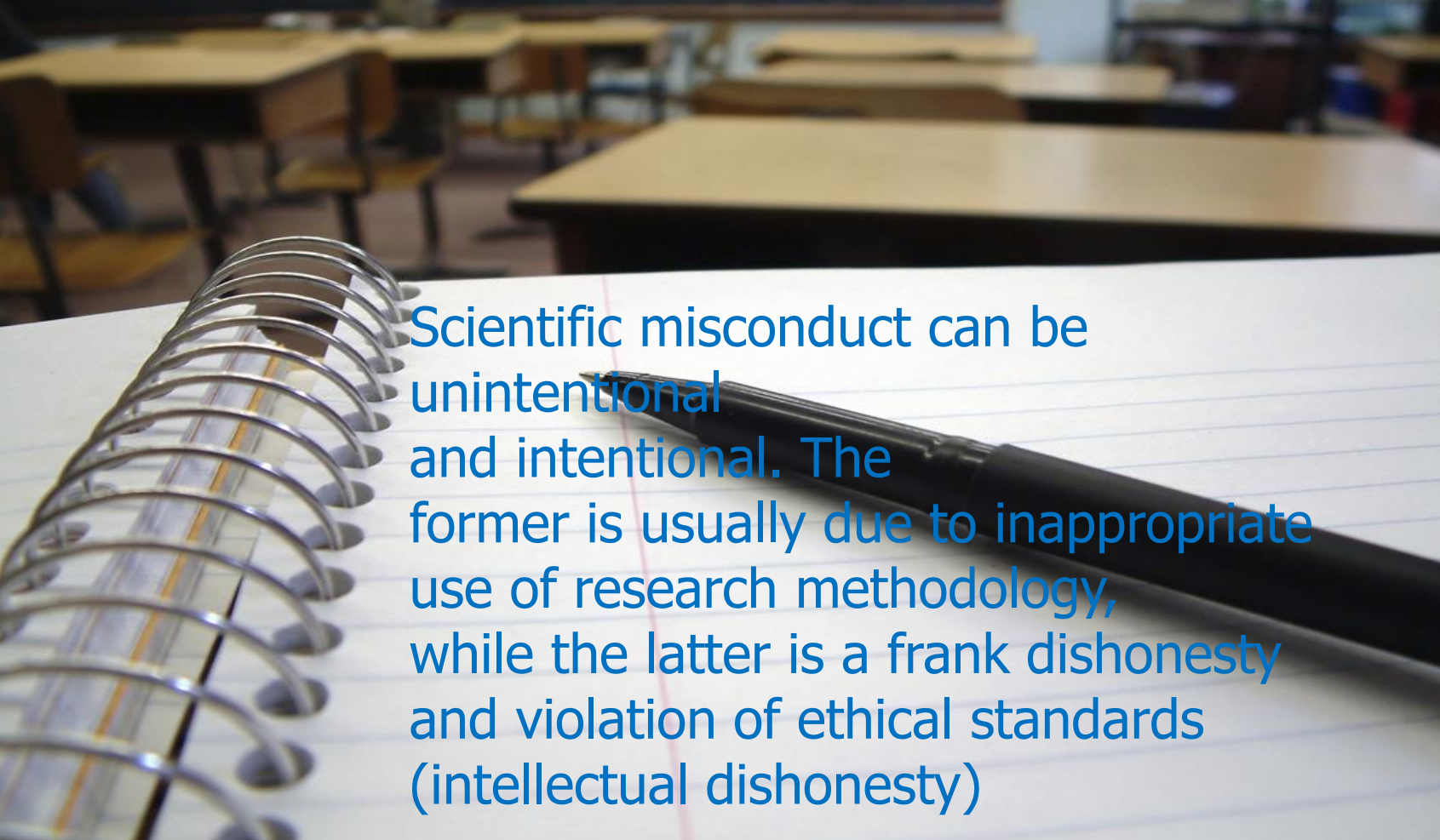


Quotations require "quotation marks"  
Reference to the original source  
If you don't provide a reference, it is still plagiarism  
If you don't quote correctly or you don't provide a reference, it is still plagiarism,



# PLAGIARISM

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Scientific misconduct can be unintentional and intentional. The former is usually due to inappropriate use of research methodology, while the latter is a frank dishonesty and violation of ethical standards (intellectual dishonesty)



# TYPES OF PLAGIARISM

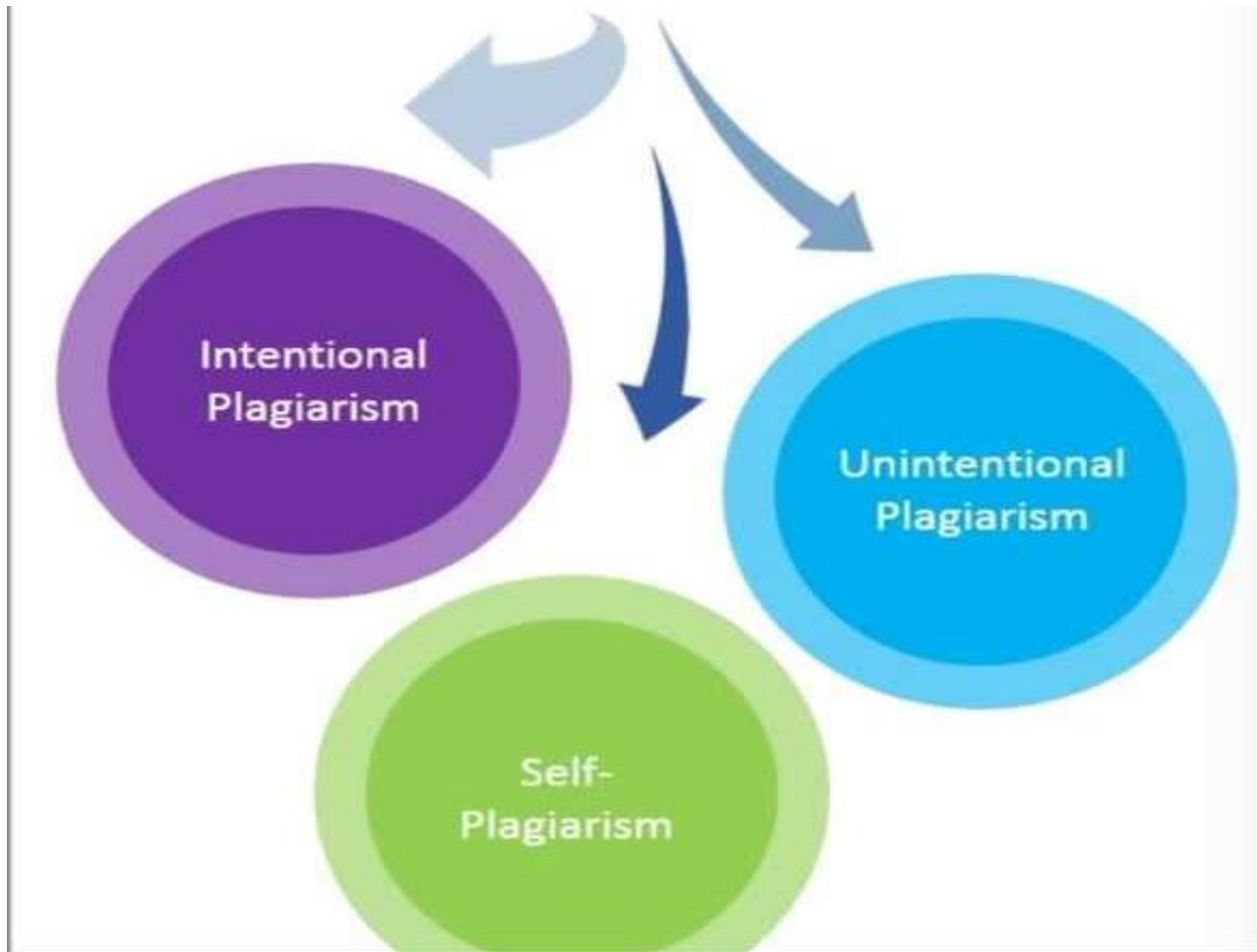
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**Types of Stealing Intellectual Property?**



# TYPES OF PLAGIARISM



# TYPES OF PLAGIARISM



(Five Types of Plagiarism n.d., Wilson, 2007)



# TYPES OF PLAGIARISM

Paraphrasing someone else's words and attempting to pass it off as your own.

Taking your own previously published work (to which you've sold the rights) and reusing all or parts of it in a new work. (this is self-plagiarism.)

Submitting someone else's work with your name on it.

**4** TYPES OF PLAGIARISM TO AVOID

Using parts of someone else's work in your own without citation.



## Unintentional Plagiarism

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- **Paraphrasing poorly:** Changing a few words without changing the sentence structure of the original, OR changing the sentence structure but not the words.
- **Quoting poorly:** Putting quotation marks around part of a quotation but not around all of it, or putting quotation marks around a passage that is partly paraphrased and partly quoted.
- **Citing poorly:** Omitting an occasional citation or citing inaccurately.



# INTENTIONAL PLAGIARISM

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- **Passing off** as one's own pre-written papers from the Internet or other sources.
- **Copying** an article from the Internet, on-line source, or electronic database without quoting or giving credit.
- **Cutting and pasting** from more than one source to create a paper without quoting or giving credit.
- **Borrowing words** or ideas from other students or sources without giving credit.



# FIRST TYPE OF PLAGIARISM

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## Plagiarism of Words

The use of another's exact words without citing the author (Reference)

### Incorrect:

Plagiarism is the reproduction of someone else's words, ideas or findings and presenting them as one's own without proper acknowledgement.

### Correct:

Plagiarism is the "reproduction of someone else's words, ideas or findings and presenting them as one's own without proper acknowledgement" (Reference).

# THIRD TYPE OF PLAGIARISM

## Plagiarism of Ideas



**Presenting another's ideas as your own without giving the person credit**

**Submitting a paper without citing or incorrectly citing another's ideas**

# FOURTH TYPE OF PLAGIARISM

## Plagiarism of Authorship

Turning in a replication of another's work  
Submitting a paper that you got off the internet or from a friend and presenting it as your own





## FIFTH TYPE OF PLAGIARISM



### Plagiarism of Self

The use of previous work for a separate assignment

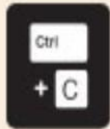
Although these were your original words and thoughts, receiving credit for a previous assignment is considered cheating

# TYPES OF PLAGIARISM



## Clone

Submitting another's work, word-for-word, as one's own



## CTRL-C

Contains significant portions of text from a single source without alterations



## Find - Replace

Changing key words and phrases but retaining the essential content of the source



## Remix

Paraphrases from multiple sources, made to fit together



## Recycle

Borrows generously from the writer's previous work without citation



## Hybrid

Combines perfectly cited sources with copied passages without citation



## Mashup

Mixes copied material from multiple sources



## 404 Error

Includes citations to non-existent or inaccurate information about sources



## Aggregator

Includes proper citation to sources but the paper contains almost no original work



## Re-tweet

Includes proper citation, but relies too closely on the text's original wording and/or structure

# TYPES OF PLAGIARISM

## Clone

Submitting another's work, word-for-word, as one's own

Frequency  9.5

Problematic  9.5

Original

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

Unoriginal

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

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Problematic



Original

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Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

Unoriginal

## The Beautiful Yosemite Valley

From the time of its first discovery by non-indigenous people in the mid-nineteenth century Yosemite Valley has held a special, even religious, possession on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. And Yosemite holds a special grip on the western mind, while perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

# TYPES OF PLAGIARISM



## Find - Replace

Changing key words and phrases but retaining the essential content of the source

Frequency



Problematic



Original

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

Unoriginal

### A Beautiful Setting in Yosemite

Since its first discovery by non-native people in the mid-19th century Yosemite Valley has held a special, even sacred, hold on the American psyche because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mindset, perceptions about the Valley have evolved over time due to changing political movements, migration patterns and environmental issues as man has become more attuned to their relationship and impact on nature.

# TYPES OF PLAGIARISM



## Remix

Paraphrases from multiple sources, made to fit together



Original

Unoriginal

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

### An Untouched View

*A History of Settlement and Change in Yosemite Valley*

The first non-natives to see Yosemite Valley were probably members of the mid-nineteenth century Joseph Walker Party, who crossed the Sierra Nevada from East to West. The first descriptions of Yosemite came almost 20 years later. From the start, the valley has been renowned for its natural beauty, and highly regarded as the centerpiece of Yosemite National Park, attracting visitors from around the world. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to their relationship and impact on nature.

# TYPES OF PLAGIARISM



## Recycle

Borrows generously from the writer's previous work without citation

Frequency



Problematic



Original

Unoriginal

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

### Ecology 201:

#### An Unnatural Expectation

*The Impact of Exploration and Settlement in Yosemite Valley*

From its first discovery by the Ahwahnechee in the mid-nineteenth century Yosemite Valley has held a unique, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time reflecting changing politics, human migration patterns and the rise of environmental concerns as man has become more attuned to his relationship and impact on nature.

# TYPES OF PLAGIARISM



## Hybrid

Combines perfectly cited sources with copied passages without citation

Frequency

.5

0 1 2 3 4 5 6 7 8 9 10

Problematic

1.1

0 1 2 3 4 5 6 7 8 9 10

Original

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

Unoriginal

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. "Native Americans have lived in the Yosemite region for as long as 8,000 years. The first people that we have record of was a band of Native Americans that called the Valley "Ah-wah-nee" and themselves the Ahwahnechee."<sup>1</sup> While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and



# TYPES OF PLAGIARISM

## Mashup

Mixes copied material from multiple sources



Original

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

Unoriginal

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century Yosemite Valley has held a special, even religious, hold on the American conscience. The work of Ayres gave easterners an appreciation for Yosemite Valley and started a movement to preserve it. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to their relationship and impact on nature. The 1849 California Gold Rush led to conflicts

# TYPES OF PLAGIARISM



## 404 Error

Includes citations to non-existent or inaccurate information about sources

Frequency

.6



Problematic

1.3



Original

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

Unoriginal

### Perceived Beauty: Man's Nature

*Exploration and Settlement in Yosemite Valley*

"Since its first discovery by the Joseph Walker Party in the mid-nineteenth century"<sup>1</sup> "Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all "special temples of Nature."<sup>2</sup> "While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to their relationship and impact on nature."<sup>3</sup>

# TYPES OF PLAGIARISM



## Aggregator

Includes proper citation to sources but the paper contains almost no original work

Frequency

2.8



Problematic

2.9



Original

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

Unoriginal

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*<sup>1</sup>

Yosemite Valley was first sighted by non-Indians in 1833 by Joseph Rutherford Walker and his group of explorers.<sup>2</sup> Yosemite has a long and diverse cultural history that helped to shape the region, country, and even the world.<sup>3</sup> While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to their relationship and impact on nature.<sup>4</sup>

# TYPES OF PLAGIARISM



## Re-tweet

Includes proper citation, but relies too closely on the text's original wording and/or structure

Frequency



Problematic



Original

Unoriginal

### A Natural Setting

*A History of Exploration and Settlement in Yosemite Valley*

Since its first discovery by non-indigenous people in the mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature. While Yosemite holds a special grip on the western mind, perceptions about the Valley have evolved over time due to changing politics, migration patterns and environmental concerns as man has become more attuned to his relationship and impact on nature.

### A History of Exploration and Settlement in Yosemite Valley

From its earliest discovery by non-indigenous people in the mid-nineteenth century Yosemite Valley has held a spiritual hold on the American conscience; its beauty is incomparable and has been held up as one of the grandest of all special temples of Nature. While Yosemite has a special grip on the western mind, impressions about the Valley have evolved over time, shaped by changing politics, migration patterns and environmental concerns as mankind has become more attuned to its relationship and impact on nature.'



# HOW TO PREVENT PLAGIARISM

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**PLAGIARISM**  
Avoid it at all costs!





# HOW TO PREVENT PLAGIARISM

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## Step 1: Know what plagiarism is

- **Plagiarism** is using the ideas or words of others and passing them off as your own. Make sure you are aware of the **common types of plagiarism**.

## Step 2: Know how plagiarism happens

- Make sure as a UNSW student you are aware of **how plagiarism occurs**.

Determine the reasons why plagiarism occurs

## Step 3: Develop effective academic skills

- Good academic skills make plagiarism less likely to occur. Take every opportunity to **develop your academic skills**.

- Institution support and respect the IRB  
A culture of compliance
- Adequate documentation of IRB findings and actions
- Seminars and Discussions



# PENALTIES OF PLAGIARISM

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- Plagiarism can be **intentional or unintentional**, both have consequences.
- Receiving **zero on the assignment**
- Failing in the course
- Stop the promotion / Ranking
- Suspension
- Expulsion



# HOW TO DETECT PLAGIARISM

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- DupliChecker

- Plagiarisma

- Plagiarism Checker

- Write Check






- Aplag

- CheckForPlagiarism

- iThenticate

- Turnitin – A most recognized and widely used

## Turnitin Score

0%	Blue image	
1-24%	Green image	
25-49%	Yellow image	
50-74%	Orange image	
75-100%	Red image	





# DIFFERENTIATE BETWEEN PLAGIARISM AND SIMILARITY

## Lung Function Test Impression:

Ventilatory lung function test parameters were recorded in standing position before and after bronchodilator challenge. <sup>1</sup> Forced Vital Capacity (FVC), Forced Expiratory Volume in First Second ( FEV1), Forced Expiratory Ratio (FEV1/FVC % ), Peak Expiratory Flow (PEF), Forced Expiratory Flow 25% (FEF-25%), Forced Expiratory Flow 50% (FEF-50%) Forced Expiratory Flow-75% (FEF-75%) <sup>2</sup> and Maximum Mid Expiratory Flow (MMEF) all were within normal range.

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### ORIGINALITY REPORT

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**64%**

SIMILARITY INDEX

**51%**

INTERNET SOURCES

**51%**

PUBLICATIONS

**53%**

STUDENT PAPERS

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## **TIPS TO AVOID THE PLAGIARISM**


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- Teach the skills to understand the meaning of the sentence(s)
- Write the sentence/s in your own words without disturbing the actual meaning
- Enables to acknowledge the original sources including idea, text and diagrams
- Teach how to use quotation marks where needed
- Keeps the sources in correct context
- Educate skills of critical analysis and interpretation
- Educate skills of referencing and citation
- Properly acknowledge and cite the original reference
- Properly placed the references in text & reference section



## TIPS TO AVOID THE PLAGIARISM

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- Give yourself enough time
  - To research
  - To write
  - To review
- Take good notes
  - Words, examples you may want to use
  - Details about the material—author, title, source, etc.
  - Where you found it
- Quote, paraphrase, and cite—correctly and consistently
  - APA, MLA, Turabian
  - Whatever style your instructor assigns
- Give sources for all things that are not your own
  - Words
  - Pictures
  - Data
  - Ideas



## Online plagiarism checker tools

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1. Un plag – Free Plagiarism Checker
2. Copy leaks-Free Plagiarism Checker
3. Plagiarism-detect
4. Small seo tools
5. Dupli checker
6. Viper
7. Quetext
8. Dust ball
9. Plagiarism checker
10. Plag scan



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**THANK YOU**