Secondary school students' source use in inquiry project-based learning (PjBL): Working towards avoiding plagiarism and engaging with sources

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Which of the following is/are considered plagiarism?

- Copying others' work directly onto my paper as if it were my own work. (T/F)
- Using others' ideas in my work after rephrasing the wordings without citation. (T/F)
- Submitting my friend's work in my name. (T/F)
- Using information my teacher taught me during lesson without citation. (T/F)
- Reusing my idea in exact wordings from a previous assignment without citation. (T/F)
- Using an idea from the internet with an unknown source as my own work. (T/F)

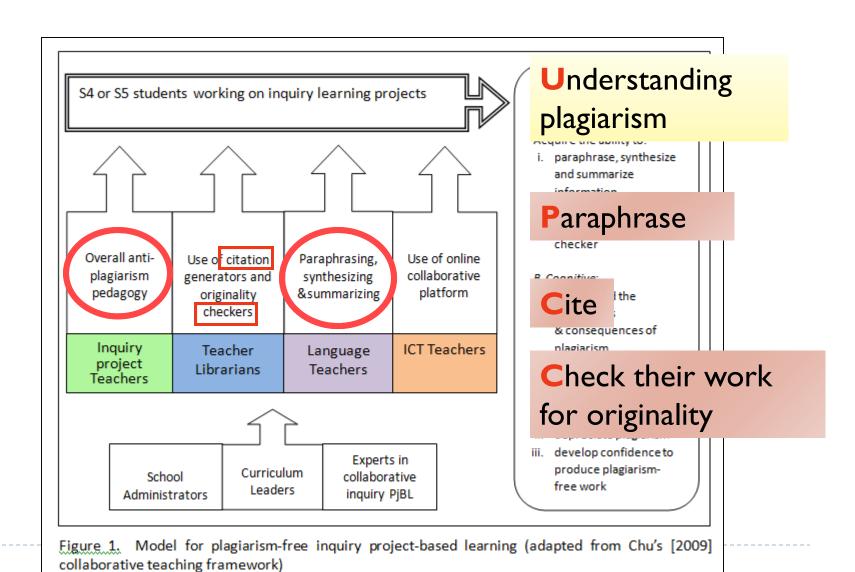


Answer the questions here:

http://goo.gl/forms/zyizqt3imK

Check results at: http://t.cn/RqxMfVi

Collaborative teaching framework for plagiarismfree inquiry project-based learning with UPCC pedagogy



"Understanding" in UPCC

- Plagiarism Knowledge and Attitudes Survey (PKAS)
 - Measure students' ability to identify plagiarism
 - Determine their attitudes towards plagiarism
 - An intervention by Asunka (2011) completely eliminated plagiarism in a student group through building a holistic understanding of plagiarism, designing collaborative coursework and instilling awareness of serious consequences of committing plagiarism

"Paraphrasing" in UPCC

- After attaining a good understanding on plagiarism, students need practice 'Paraphrasing', 'Synthesizing' and 'Summarizing' (PSS) to present ideas in their own words to avoid committing plagiarism (Roig, 1999).
- "Paraphrasing", "Synthesizing", and "Summarizing" abilities of students can be measured by a pre- and post-test

Why using an online citation machine?

Mistakes in citation made by students 學生的資料引用問題

3.2 Record down at least 2 search results in APA format:

- 1、《魅力的類防與治療》/阿泰阿編譯、1999
- 2. 的讓壓力壓倒自己:緩餅你的壓力/五點德縮著

2007

- ▶ Put author in a wrong place 錯放作者位置
- ▶ Omit publisher 遺漏出版者

Mistakes in citation made by students 學生的資料引用問題

3.2 Record down at least 2 search results in APA format:

1. Unichsored = Views a Red views/ Tayor Carel Crates

2. Book publishings in side vietus Pront

Cloter; Alstrated by Usa Kyper

- ▶ Omit publication date 遺漏出版日期
- ▶ Omit author 遺漏作者

http://old.citationmachine.net/index2.php



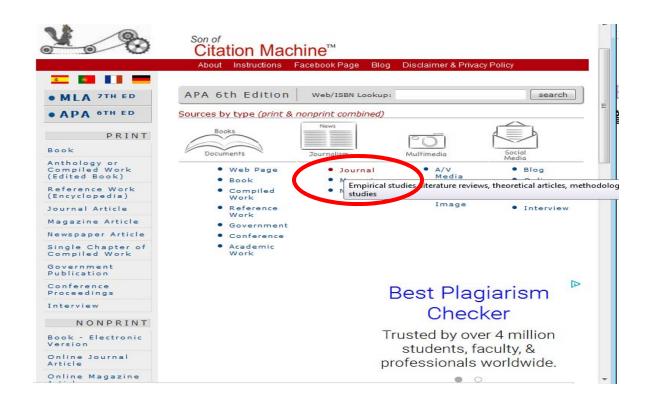
http://old.citationmachine.net/index2.php

▶ Choose the appropriate citation style (選取合適引用格式)(例: APA).



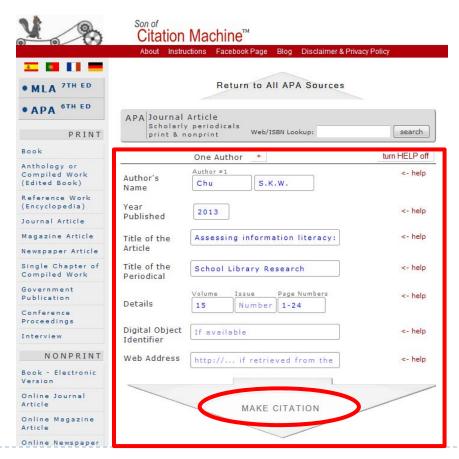
http://old.citationmachine.net/index2.php

▶ Select the source type of the material (選取適合的資料種類)(例: journal).



http://old.citationmachine.net/index2.php

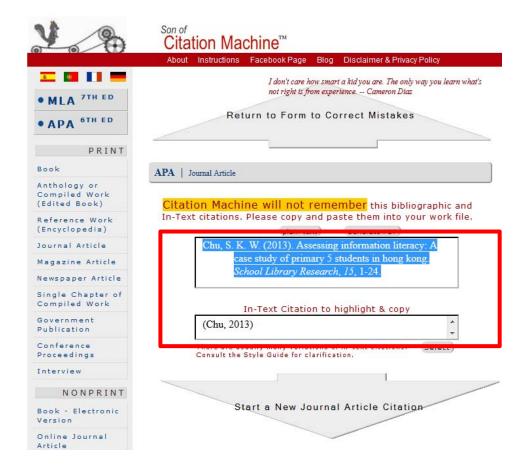
- ▶ Enter information 填妥資料
- ▶ Click "MAKE CITATION"按 MAKE CITATION.



http://old.citationmachine.net/index2.php

▶ List out bibliography and In-text citation 列出參考書目及

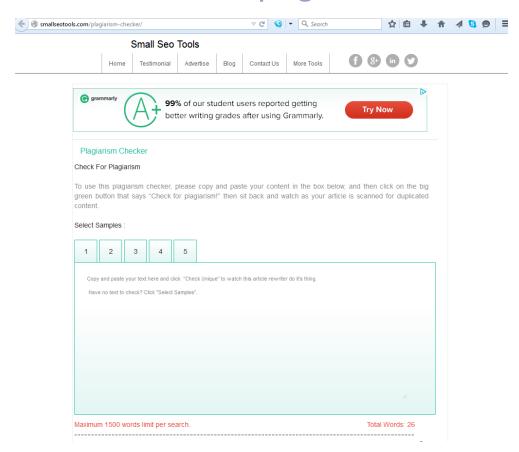
文本引用.



Online plagiarism check 網上侵權測試

Small SEO Tools:

http://www.smallseotools.com/plagiarism-checker/

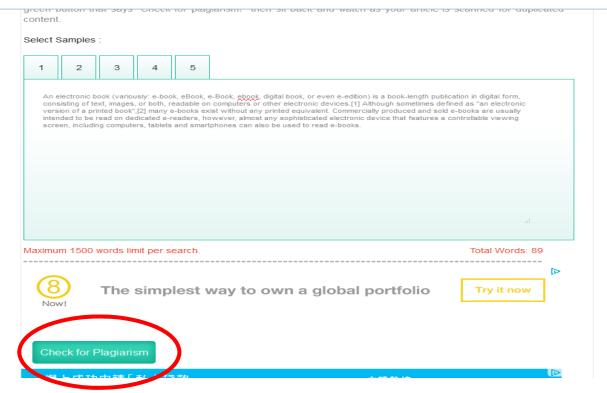


Enter text in textbox, Click "Check for Plagiarism"

在文字方塊內貼上文章,再按 "Check for Plagiarism"

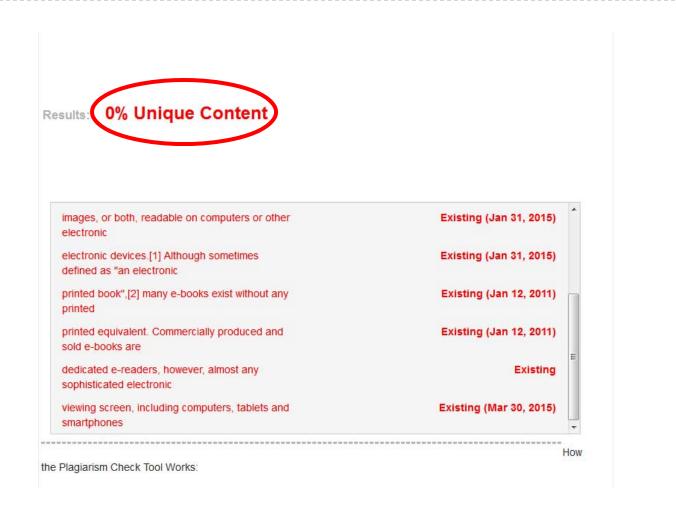
In this example, a paragraph is extracted from Wikipedia





Result: Percentage of Unique Content

結果:獨特性百分比



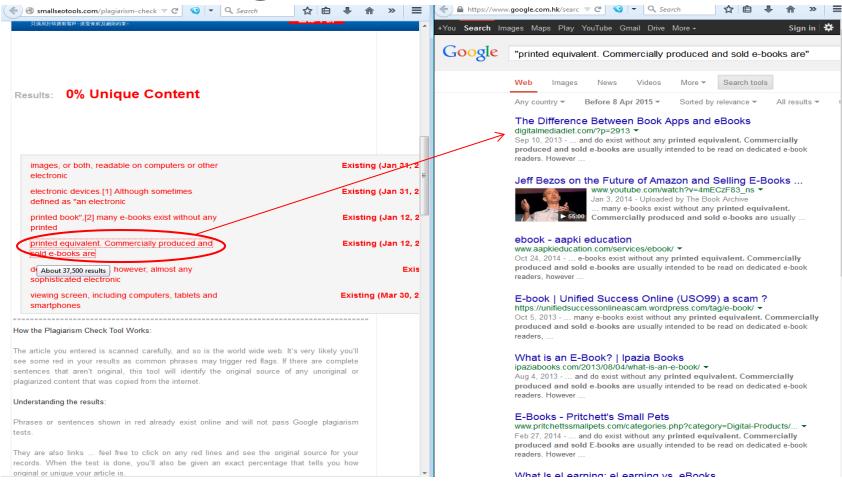
Red links: check the online information of potential plagiarism

按紅色連結以查看可能侵權的網上資訊

ults: 0% Unique Content	
mages, or both, readable on computers or other	Existing (Jan 31, 2015)
electronic	Existing (can or, 2010)
electronic devices.[1] Although sometimes defined as "an electronic	Existing (Jan 31, 2015)
printed book",[2] many e-books exist without any printed	Existing (Jan 12, 2011)
printed equivalent. Commercially produced and	Existing (Jan 12, 2011)
sold e-books are	E
dedicated e-readers, however, almost any	Existing
sophisticated electronic	
riewing screen, including computers, tablets and	Existing (Mar 30, 2015)
smartphones	

Linked to Google search result, Compare with your passage

你會被引導到Google搜尋結果,與你的原文比較



The tool picked up the Wikipedia page from which we extracted the paragraph

Examining the Effectiveness of the UPCC pedagogy for Plagiarism-free Inquiry Learning in the Junior Secondary School Setting

Research questions:

- How effective was the UPCC in addressing plagiarism in junior secondary school students?
- ▶ How do students and teachers experience and evaluate UPCC as a plagiarism-free pedagogy in PjBL?

Method - Quantitative

- Survey on students' perceptions of UPCC for plagiarism in PjBL using PBWorks
 - Likert Scale; I = Strongly Disagree, 6 = Strongly Agree
- I. Instructional support on UPCC
- 2. Understanding Plagiarism
- 3. Paraphrasing, synthesizing and summarizing
- 4. Generating appropriate citations using Citation Machine
- 5. Originality self-check using SEO Tools

1. Instructional Support

1.	My LS teacher taught me what plagiarism is.	I	2	3	4	5	6
2.	My LS teacher taught me the skill of paraphrasing information.	I	2	3	4	5	6
3.	My LS teacher taught me the skill of synthesizing information.	I	2	3	4	5	6
4.	My LS teacher taught me the skill of summarizing information.	I	2	3	4	5	6
5.	My LS teacher taught me how to use an online citation generator (e.g. Citation Machine) to create proper citations.	I	2	3	4	5	6
6.	My LS teacher taught me how to use an online originality checker (e.g. Small SEO Tools) to check the originality of my work before submission.	I	2	3	4	5	6
	I= Stro	ngly D	isagr	ee, 6 =	Stro	ngly A	Agree

2. Understanding Plagiarism

1.	I am better at identifying cases involving plagiarism after completing the recent LS Group Project	I	2	3	4	5	6
2.	I am better at avoiding plagiarism after completing the recent LS Group Project	I	2	3	4	5	6
3.	I gained a better understanding of the importance of avoiding plagiarism after completing the recent LS Group Project	I	2	3	4	5	6

I = Strongly Disagree, 6 = Strongly Agree

3: Paraphrasing, Synthesizing and Summarizing

ı	I am more capable of expressing others' ideas in my own words (i.e. paraphrasing) after working on the recent LS group project.	I	2	3	4	5	6
2	I am more capable of combining different ideas (i.e. synthesizing) after working on the recent LS group project.	I	2	3	4	5	6
3.	I am more capable of presenting the main information in a concise statement (i.e. summarizing) after working on the recent LS group project.	I	2	3	4	5	6
4	I am more capable of distinguishing the three skills (i.e. paraphrasing, synthesizing and summarizing) after working on the recent LS group project.	I	2	3	4	5	6

4: Generating appropriate citations using Citation Machine

1	I find online citation generators (e.g. Citation Machine) easy to use in helping me create proper citations.	ı	2	3	4	5	6
2	I find online citation generators (e.g. Citation Machine) effective in helping me create proper citations.	I	2	3	4	5	6
3	I prefer using online citation generators (e.g. Citation Machine) to create citations than doing it on my own.	I	2	3	4	5	6
4	I am more capable of producing proper citations after working on the recent LS group project.	I	2	3	4	5	6
5	I will make use of a citation generator (e.g. Citation Machine) to create citations with proper format in the future.	I	2	3	4	5	6

5: Originality self-check using SEO Tools

I	I find online originality checkers (e.g. Small SEO Tools) easy to use in helping me produce a plagiarism-free work.	I	2	3	4	5	6
2	I find online originality checkers (e.g. Small SEO Tools) effective in helping me produce a plagiarism-free work.	I	2	3	4	5	6
3	I am more capable of checking the originality of my work before submission after working on the recent LS group project.	I	2	3	4	5	6
4	I will make use of an online originality checker (e.g. Small SEO Tools) to assess my work to avoid plagiarism in the future.	I	2	3	4	5	6

Method – Qualitative

- 19 groups took part in focus group interviews.
- Questions for students:
 - views on their experience of learning to avoid plagiarism through UPCC
 - their knowledge and understanding of plagiarism
 - the ways to avoid plagiarism
- Face-to-face discussion with the Liberal Studies teachers:
 - views upon students' focus group responses
 - their group project performance

Using *Plagiarisma* to check level of Plagiarism

- An online tool indicating written text originality, comparing with Yahoo search results.
 - Can analyze text without word limit.
 - Can provide an overall originality score for the complete group assignment.
 - Can work with Chinese text
- Originality < 100% : blocks of texts copied from other sources will be highlighted and listed
- These blocks of texts can be manually entered into Google for secondary checking to enhance reliability.

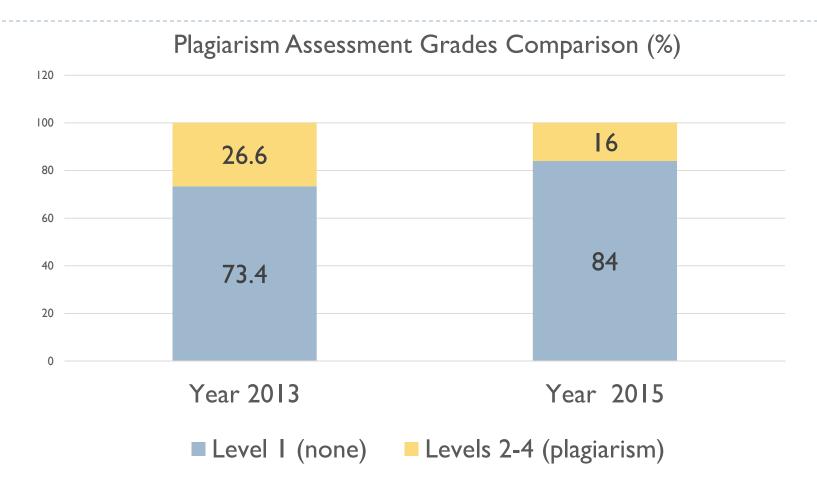
Assessing Plagiarism: Scale

Level	Label	Description
Level I	None	No plagiarism
Level 2	Minor	 Copy a block of text from the student's previous work or Copy a block of text of less 40 words* from others' sources without any citation
Level 3	Moderate	 Copy a block of text of over 40 words from others' sources without any citation, but Give references at the end of the work or Give references in form of an attachment
Level 4	Serious	 Copy a block of text of over 40 words from others' sources without any citation

Batane, T. (2010). Turning to Turnitin to fight plagiarism among university students. *Journal of Educational Technology & Society*, 13(2), 1--12.

*APA Publication Manual suggest to give a quotation for copying a block of text of 40 or more words. (APA, 2009: p. 171).

Results without UPCC (2013) & with UPCC (2015)



- Valid N = 347
- % students with NO plagiarism increased from 73.4 84%

Test on Understanding plagiarism (Valid N = 347)

		#	%
	A) Direct copying and pasting others' work onto my paper as if it were my own work	277	82.7%
Ol Which of the	B) Using others' ideas in my work after rephrasing the wordings without citation	167	49.9%
QI.Which of the	C) Submitting my friend's work in my name	272	81.2%
following is/are considered	D) Using information my teacher taught me during lesson without citation	143	42.7%
plagiarism?	E) Reusing my idea in exact wordings from a previous assignment without citation	112	33.4%
	F) Using an idea from the internet with an unknown source as my own work	275	82.1%
	0 option	19	5.4%
	l option	56	15.8%
Number of	2 options	17	4.8%
	3 options	75	21.2%
options (A-F)	4 options	79	22.3%
	5 options	33	9.3%
	6 options (correct answer)	75	21.2%

Descriptive statistics for all surveyed students (Valid N=347)

Perceptions	Ν	Minimum	Maximum	Mean	Std. Deviation
Instructional support on UPCC	347	1.00	6.00	4.607	0.893
Understanding Plagiarism	345	1.00	6.00	4.458	0.855
Paraphrasing, synthesizing and summarizing	344	1.50	6.00	4.326	0.761
Generating appropriate citations	343	1.00	6.00	4.226	0.875
Originality self-check	346	1.00	6.00	4.276	0.950

Comparison by Top and Bottom 21%

- Top 21% = The students who answered "Test on Understanding plagiarism" correctly by selecting all 6 options
- Bottom 21% = The students who answered the above question poorly by selecting 0 or 1 options

Top 21 % & bottom 21% students' survey domain scores compared

	Bott	Bottom 21%		Top 21%	T-test
	Mean	Sd	Mean	Sd	p-value
Instructional support on UPCC	4.17	1.033	4.728	0.911	0.002*
Understanding Plagiarism	4.19	0.961	4.509	0.953	0.053
Paraphrasing, synthesizing and summarizing	4.087	0.848	4.493	0.821	0.005*
Generating appropriate citations	3.878	0.807	4.360	0.876	0.001*
Originality self-check	3.945	0.909	4.420	0.970	0.003*

 Statistically significant results were found between top and bottom 21% groups across all domains except "self-perceived Understanding Plagiarism"

Top 21 % & bottom 21% students' project scores compared

	Bott	om 21%	Top 21%		
	Mean	Sd	Mean	Sd	
2014-2015 Project score (Full score=50)	33.48	6.814	36.70	6.465	

Difference between Top and Bottom 21% students' project scores were statistically significant (p < 0.05).

Qualitative categories for students and teachers' experience of UPCC

		Category (number of references)	Example References
		Paraphrasing, Summarizing, Synthesizing skills (67)	"when we look for some information on Yahoo or Google, we would try to change some wordings (when using the information)"
	Perceived JPCC	Citation skills (37)	"Without Citation Machine, we may not remember the details we need to provide in a citation."
	effectiveness	Originality check (34)	"We have some websites to check plagiarism, and find out the percentage of unique content."
-		Understanding the concept of plagiarism (32)	"Yes, we think we shouldn't copy and paste. We should understand the whole thing, so we change some of the words in the content."

Our focus in the 2nd study in the project:

How these Forms I—3 students report information from sources & comment on sources in writing their project reports

Addressing plagiarism is only to fulfill part of the mission

Hong Kong school students

-to select appropriate source materials, assess & analyse the materials, and use them in formulating their arguments.

(Curriculum Development Institute n.d.; HKEAA 2015;

▶ "Zhongguo yuwen jiaoyu xuexi linyu kecheng zhiyin" 2012)

Two RQs:

I.How did the students report information from the sources?

2. How did the students evaluate their sources?

Data

Total 87 group project reports (Forms I-3)

Randomly sampled 30 texts (10 texts selected from each Form)

Table 1. Number & distribution of sources in students' project reports

	No. of sources in	No. of sources in
	total 87 texts	sampled 30 texts
Introduction	7 (1.3%)	2 (1.1%)
Topic of Research	1 (0.2%)	1 (0.6%)
Literature Review	483 (91.8%)	162 (92.0%)
Data Analysis (Findings)	34 (6.5%)	10 (5.7%)
Conclusion/Limitation/ Suggestion	1 (0.2%)	1 (0.6%)
Total	526	176
Average number per text	6.0	5.9

RQI: Students reporting information from sources

(in the Literature Review section of the 30 sampled project reports)

The Literature Review section of the 30 sampled texts

78 reporting verbs & expressions, with total frequency of 319

Reporting verbs & expressions:

--those expressions/structures that report information from the sources in one way or another

Top 8 reporting verbs & expressions:

used 155 times (nearly 50%)

	Reporting verbs & expressions	Frequency (155)
1.	這篇文獻/訪問/研究報告/資料/調查/作者/社評指出 (points out)	38
2.	這篇文章/這個網站/這則新聞/資料/他的主題/其目的/文章的主旨是 (is)	33
3.	這份資料/(文章)/(這本書)/網頁回應 (responds to) 焦點問題 (our focal question)	27
4.	這份文件/這本書/(文章)/文獻/作者/本網站 <mark>講述 (talks about)</mark>	15
5.	這篇報導/文章/文中/作者/當中 <mark>提到(mentioned)</mark>	13
6.	作者/編輯XXX/有人 <mark>認為</mark> (thought)	H
7.	這本書/第二段片段/資料/文章/網頁說明 (illustrated)	9
8.	※X報導/這本書中/文中/文章/社評提及(mentioned)	9

We tried to categorize such reporting verbs & expressions by their rhetorical functions...

First 3 categories of the 78 reporting verbs & expressions:

I. Discourse Act verbs (148 occurrences)
(Hyland 2002)
(44.4% of 319)

--focusing on verbal expression

First 3 categories of the 78 reporting verbs & expressions:

2. Summarizing the gist or presenting a key aspect of source without linking to the focal question under research (71 occurrences) (22.3% of 319)

```
這篇文章/這個網站/這則新聞/資料/他的主題/其目的/文章的主旨……是……(33)
這篇文獻/作者/剪報/報導……指……(5)
研究結果/某調查/XX報導……顯示……(4)
這份資料的內容/當中的資料……包括……(3)
資料/(文章)反映……(3)
```

First 3 categories of these reporting verbs & expressions:

3. Summarizing the gist of source with connection to the focal question under research (67 occurrences) (21% of 319)

```
這份資料/(文章)/(這本書)/網頁.....回應
.....焦點問題.....(27)
(作者)回答......焦點問題 (7)
文獻......所回答的焦點問題.....(7)
這關於焦點問題的第三條,受到網絡欺凌後會導
致甚麼? (7)
```

Summary of findings for RQ1:

- Students seems to use a wide range of reporting verbs & expressions
- Over-reliance on a restricted range of reporting expressions?
- Over-reliance on summarizing single sources?

RQ2. The students' evaluation of their sources

- I. Most source reporting acts (instances) were 'neutral'
- 2. 6 l instances of positive evaluation(~2 in each project report)
- 3. 62 instances of critical evaluation (~2 in each project report)

We tried to categorize the positive & critical evaluations by the rhetorical strategies employed...

I. Positive evaluation

a) Sources as valuable learning materials or materials for reference (45/61) ~ 80%

EXAMPLE 1: (這份資料)讓我們清晰地了解到香港政府的對策……大大幫助了我們的專題研習。(1A Gp8)

EXAMPLE 2: 這份文獻可以幫助我們了解到現代人濫用手機鏡頭的情況究竟有多嚴重。 (3C Gp7)

I. Positive evaluation

b) Viewpoints in source shared by the students (often linked to their own experiences) (6/61)

EXAMPLE 3: 這文章雖然不太長,但是裏面的方法的確可以幫助青少年,因為我也是過來人.....(2D Gp5)

I. Positive evaluation

c) Sources as high-quality research writing (13/61)

EXAMPLE 4: 本章都能以不同角度描述重組的影響,為不偏不倚。 (2A Gp4)

a) Point of view in source problematic (33/62)

EXAMPLE 5:我們發現網上有不少資訊立場過於主觀或是誇大了真實情况(3A Gp9)

EXAMPLE 6: 研究指出.....這是毫無說服力,也是一種不負責任的說法。
(3C Gp2)

b) Inadequacy in the research (23/62)

探討自由行的影響……故我們搜集個人的意見,探討自由行的影響……故我們搜集(1A Gp6)

c) Problematic data (13/62)

EXAMPLE 8: 此網站為公開編輯的百科全書,隨時可被任何人修改,甚至刪除,故可信性不高。(1A Gp2)

EXAMPLE 9: 此書於2001年出版,提供很多的數據或資料未更新.....(2A Gp3)

d) Writing style problematic (3/62)

EXAMPLE 10: 有一些專有名詞 久缺解釋,令人容易摸不着頭腦。 (2A Gp2)

e) Conflicting evidence (2/62)

EXAMPLE 11: 作者提到自拍的新潮已經普遍全球,但其實根據我們收集到的資料,發現其實大部分自拍的人都只是一些青少年,而並不是成年人,老人等等。(1A Gp4)

Summary of findings for RQ2:

 In about 80% of the positive evaluation, the students foregrounded the usefulness of the sources from the perspective of themselves as <u>learners</u>, or by referring to personal experiences

Summary of findings for RQ2:

 A high frequency of critical evaluation of sources, but with some direct & harsh criticism

Criticize for the sake of criticizing?
 Criticism found in single-source summaries;
 NOT linked to make an argument, or to highlight the value of their project

(Groom 2000; Mansourizadeh & Ahmad 2011;

Petrić 2007)

Pedagogical implications

- I. Explicit teaching of reporting verbs & expressions
- variety & appropriate selection
- 2. Explicit teaching of how to evaluate sources by using reporting verbs & expressions (Hyland 2002), or using additional expressions \rightarrow
- to form argument

Future research

- I. Link students' source reporting practices in Chinese to their emerging use of source reporting in English writing
- 2. Effective pedagogy
- Cross-sectional comparison & longitudinal tracking
- 4. Impact on their academic writing in English in the university
- 5. Writing analytics for automating part
- ▶ 61 of the analysis

Overall conclusion

- UPCC helps reduce level of plagiarism
- Students with better understanding of plagiarism tend to receive better grade
- More fine-grained pedagogy will be implemented to further reduce plagiarism

- School students also need to be explicitly taught how to report & evaluate sources
- This will have long-term implications for their success in academic writing
- Studying how students report sources at different stages of their learning career will be necessary for building a developmental model of expertise in source use

Thank you for your attention

Questions & comments?