

**The Use of Technology during Academic Acculturation: Case Studies of Chinese-  
Speaking International Doctoral Students**

**DISSERTATION - SUPPLEMENT**

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy  
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By

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**Supplement 3-1 A College-Level Classroom Setting in Taiwan**



Citation:

Ding Ai Limited Company (Photographer). ( n.d.). [Digital image]. Retrieved from [https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjJoPeSqLfMAhXHRiYKHcgnCOIQjRwIBw&url=http%3A%2F%2Fdingai.hbdi.com.tw%2Fcategory%2F%25E6%259C%2580%25E6%2596%25B0%25E6%25B6%2588%25E6%2581%25AF%2Fpage%2F5%2F&psig=AFQjCNEvSONd7Ir5dfpAGg5\\_pFikc5utNA&ust=1462138337195117](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjJoPeSqLfMAhXHRiYKHcgnCOIQjRwIBw&url=http%3A%2F%2Fdingai.hbdi.com.tw%2Fcategory%2F%25E6%259C%2580%25E6%2596%25B0%25E6%25B6%2588%25E6%2581%25AF%2Fpage%2F5%2F&psig=AFQjCNEvSONd7Ir5dfpAGg5_pFikc5utNA&ust=1462138337195117)



Citation:

Zhang, F. S. (Photographer). (2008, October 28). *A Shandong University student's reflection of traveling in Taiwan* [Digital image]. Retrieved from <http://www.huaxia.com/sd-tw/ltwl/2008/10/1202892.html>

## Supplement 3-2 Common Assignments and Exams with Short-structured Questions

### 第壹部分：選擇題（佔 54 分）

#### 一、單選題（佔 30 分）

說明：第1題至第15題，每題選出一個最適當的選項，標示在答案卡之「選擇題答案區」。每題答對得2分，答錯不倒扣。

- 下列文句「」內字音相同的選項是：  
(A)呆了半晌，他才從打碎花瓶的震「懾」中回過神來，「躡」著腳步逃開  
(B)家屬們難掩悲「愴」，踉踉「蹌」蹌地步入追思會場，悼念王永慶先生  
(C)這位部長具專業能力卻缺乏政治手「腕」，以致黯然下臺，令人「惋」惜  
(D)奶粉含有毒物質被「揭」發後，政府急謀對策，「遏」止相關製品流入市面
- 下列文句□內依序應填入的字，完全正確的選項是：  
甲、突然聽到這項意外消息，大家面面相□，一時之間不知如何回應  
乙、昨天大伙一連吃了三碗刨冰，仍覺得意□未盡，相約明天再去吃冰  
丙、球隊苦練多年，原本志在奪牌，沒想到遭遇其他強勁對手，竟□羽而歸  
丁、當香噴噴的紅燒肉一端上桌，大伙便顧不得形象爭相挾取，準備大□朵頤  
(A)覷／猶／鍛／快 (B)歎／猶／鍛／塊  
(C)覷／尤／鍛／快 (D)歎／尤／鍛／塊
- 閱讀下文，根據文中的情境，選出依序最適合填入甲、乙的選項：  
清光四射，天空皎潔，甲，坐客無不悄然！舍前有兩株梨樹，等到月升中天，清光從樹間篩灑而下，乙，此時尤為幽絕。直到興闌人散，歸房就寢，月光仍然遍進窗來，助我淒涼。（梁實秋〈雅舍〉）  
(A)四野無聲，微聞犬吠／地上陰影斑斕  
(B)蒼然暮色，自遠而至／地上浮光躍金  
(C)竹枝戲蝶，小扇撲螢／樹下芳草鮮美  
(D)風雲開闢，山岳潛形／樹下燈焰幢幢
- 閱讀下文，選出敘述正確的選項：  
夫盜亦人也，冠履焉，衣服焉；其所以異者，退避之心，正廉之節，不常其性耳。（羅隱〈英雄之言〉）  
(A)一般人比盜匪更注重衣服、鞋帽的端正整齊  
(B)一般人和盜匪一樣，都很容易見利忘義、見財思得  
(C)盜匪和一般人的區別，在於他們無法保有謙讓、廉潔的善性  
(D)盜匪總是利用人性貪圖物質享受的弱點，引誘一般人迷失善性
- 閱讀下文，選出最符合全文主旨的選項：  
文必本之六經，始有根本。唯劉向、曾鞏多引經語，至於韓、歐，融聖人之意而出之，不必用經，自然經術之文也。近見巨子動將經文填塞，以希經術，去之遠矣。（黃宗羲〈論文管見〉）  
(A)批評當世文人只知徵引經文，而不能融通聖人之意  
(B)強調為文者唯有出入經史，方能與韓、歐等大家齊名  
(C)分析劉向、曾鞏、韓愈、歐陽脩等人引用經術文字之優劣  
(D)說明援經入文的兩種方法：一為多引經語，一為融聖人之意

巨子：泛稱某方面的權威人物。  
希：求。

**Note:** Most questions in an assignment or an exam consist of multiple choice questions as the image showed above.



## 第貳部分：非選擇題（共三大題，佔 54 分）

說明：請依各題指示作答，答案務必寫在「答案卷」上，並標明題號一、二、三。

### 一、語譯（佔 9 分）

請將框線內的文言文譯為語體文，並注意新式標點之正確使用。

宮中府中，俱為一體，陟罰臧否，不宜異同。若有作姦犯科，及為忠善者，宜付有司，論其刑賞，以昭陛下平明之理，不宜偏私，使內外異法也。（諸葛亮〈出師表〉）

### 二、意見闡述（佔 18 分）

請綜合框線內的兩個事例，提出你的看法。文長限 250 字—300 字。

- (一) 蘇麗文在北京奧運跆拳道銅牌爭奪賽中，強忍左膝受傷之痛，十一次倒下仍奮戰到底，令全場動容。回國後，數所大學爭取她擔任教職。
- (二) 邱淑容參加法國 18 天超級馬拉松賽，途中腳底破皮受傷，仍堅持跑完全程。送醫後，因細菌感染引發敗血症，右腳截肢，左腳腳趾摘除。

### 三、引導寫作（佔 27 分）

人生有如一條長遠的旅途，其間有寬廣平坦的順境，也有崎嶇坎坷的逆境。你曾經遭遇到什麼樣的逆境？你如何面對逆境，克服逆境？請以「逆境」為題，寫一篇文章，可以記敘、論說或抒情，文長不限。

**Note:** There are few questions in an assignment or an exam which asks students to write short answers or an essay. In the above image, the first question asks students to translate literary Chinese (Classical Chinese literature). The second question asks students to write their opinions within 250 to 300 words after reading the two short given instances. The third question asks students to write a short essay about their difficult experience(s) and how they deal with the difficulties. All of responses are written in Chinese.

**Supplement 3-3 Survey for Students in the Pre-or-during Candidacy Exam Stage**

English Version

**Section 1 Background Information**

Name: \_\_\_\_\_

Gender:  female  male

Age:  20 – 25  26 – 30  31 – 35  36 – 40  40 +

Which country are you from? \_\_\_\_\_

How long have you been living in the U.S.?

0 - 1 year  1+ - 2 years  2+ - 3 years  3+ - 4 years  4+ - 5 years  5+ - 6 years  6 years above

Your TOEFL scores (Please fill out your **latest** TOEFL CBT or TOEFL iBT score) :

TOEFL CBT(the score range: 0 ~ 300) : \_\_\_\_\_ or

TOEFL iBT (the score range: 0 ~ 120) : \_\_\_\_\_

Are you currently pursuing a master's or PhD degree?  Master  PhD

Which school and academic program are you studying now? \_\_\_\_\_

How long have you been studying in your academic program? (If your master and PhD program are in the same academic field and in the U.S., please include the year(s) in the past.)

1 - 6 months  6+ months - 1 year  1+ - 1.5 years  1.5+ - 2 years  2+ - 3 years  3+ - 4 years

4+ - 5 years  5+ - 6 years  6 years above

**How comfortable are you in using technology to do following tasks? Please consider some forms of technology that you often use. (e.g. e-mail, a cell phone, a tablet/iPad, a computer, social media, a blog, Twitter, Facebook, QQ, WeChat, Skype...)**

	Very uncomfortable	Uncomfortable	Comfortable	Very Comfortable	Not Applicable/ Not Sure
communicate with peers in school					
communicate with professors in school					

communicate with scholars or students outside of the school					
do <b>non-academic</b> <i>reading</i> (e.g. read news, articles, fiction, poetry, or messages online)					
do <b>non-academic</b> <i>writing</i> (e.g. write comments or diaries online)					
do non-academic <i>listening</i> (e.g. watch TV shows, news, or videos or listen to music)					
do non-academic <i>speaking</i> (e.g. chat with friends through Skype or QQ)					
do <b>academic</b> <i>reading</i> (e.g. read online academic articles, posts, or list-serv)					
do academic <i>writing</i> (e.g. write academic papers, assignments, or online comments)					
do academic <i>listening</i> (e.g. watch academic related videos and speeches online)					
do academic <i>speaking</i> (e.g. discuss academic related topics with peers/professors/scholars on social media)					

10 Qs

## Section 2 Technology Use for Academic Purposes

**Academic Communities** Please consider some forms of technology. (e.g. e-mail, a cell phone, a tablet/ iPad, a computer, social media, a blog, Twitter, Facebook, QQ, WeChat, Skype...) (Please put V in an appropriate place.)

	Always 100 %	Often 75 %	Sometimes 50 %	Seldom 25 %	Never 0 %
1. I write my thoughts/ ideas/ opinions related to my study or					

academic readings in online spaces (e.g. a personal blog, online forums, my Wikispaces, facebook, or Twitter).					
2. I use technology (e.g. in e-mail or on Facebook) to discuss academic issues, courses, or assignments with <b>professors in school</b> .					
2.1 What types of technology do you use to discuss academic issues, courses, or assignments with professors in school? (You can choose more than 1 answer.) <input type="checkbox"/> E-mail <input type="checkbox"/> Cell phone texts <input type="checkbox"/> Cell phone Calls <input type="checkbox"/> Communicative Apps (e.g. Line, QQ, WeChat, or Skype) <input type="checkbox"/> Social media sites (e.g. facebook, blogs, online forums, Wikispaces, or Twitter ) <input type="checkbox"/> Other (Please specify.)					
3. I use technology (e.g. in e-mail or on Facebook) to discuss academic issues, courses, or assignments with <b>peers in school</b> .					
3.1 What types of technology do you use to discuss academic issues, courses, or assignments with peers in school? (You can choose more than 1 answer.) <input type="checkbox"/> E-mail <input type="checkbox"/> Cell phone texts <input type="checkbox"/> Cell phone Calls <input type="checkbox"/> Communicative Apps (e.g. Line, QQ, WeChat, or Skype) <input type="checkbox"/> Social media sites (e.g. facebook, blogs, online forums, Wikispaces, or Twitter ) <input type="checkbox"/> Other (Please specify.)					
4. I use technology (e.g. on Facebook, online forums, or Twitter) to discuss academic issues with <b>scholars/ students outside of the school</b> .					
4.1 What types of technology do you use to discuss academic issues with scholars/ students outside of the school? (You can choose more than 1 answer.) <input type="checkbox"/> E-mail <input type="checkbox"/> Cell phone texts <input type="checkbox"/> Cell phone Calls <input type="checkbox"/> Communicative Apps (e.g. Line, QQ, WeChat, or Skype) <input type="checkbox"/> Social media sites (e.g. facebook, blogs, online forums, Wikispaces, or Twitter ) <input type="checkbox"/> Other (Please specify.)					
	<b>Agree</b>	<b>Disagree</b>			
5. I feel I can express my ideas/ opinions in English much clearer in online environments than in face-to-face situations.					
6. I feel I learn more through using online environments to discuss academic issues, courses, or assignments than through the face-to-face method.					

	Always 100 %	Often 75 %	Sometimes 50 %	Seldom 25 %	Never 0 %
7. I use online resources to help me understand how to publish academic articles.					
8. When I attend academic conferences/ events, I use my camera, cell phone, or tablet/iPad to capture scholars' slides to help me understand what the scholars said.					
9. When I attend academic discussions or meetings (e.g. in conferences or my department), I use my laptop, tablet/ iPad, or cell phone to go online to search words, phrases, or terms that speakers/ people mention.					
10. When I attend academic discussions or meetings (e.g. in conferences or my department), I use my laptop, tablet/ iPad, or cell phone to take notes.					

10Q + 2 sub-questions

**Course Participation** (Please put V in an appropriate place.)

	Always 100 %	Often 75 %	Sometimes 50 %	Seldom 25 %	Never 0 %
1. When I read course readings and find unfamiliar words, terms, or concepts, I search online/ electronic resources to find more explanations to help me understand the texts.					
1-1 What online/ electronic resources have you used so far to help yourself understand course readings when finding unfamiliar words, terms, or concepts? (You can choose more than 1 answer.) <input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Dr. Eye</a> , <a href="#">Diction.com</a> , or <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Academic-orientated websites <input type="checkbox"/> Non-academic-orientated websites <input type="checkbox"/> Other (Please specify.) _____					

<p>1-2 What online/ electronic resources do you often use to help yourself understand course readings when finding unfamiliar words, terms, or concepts? (You can choose more than 1 answer.)</p> <p><input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Dr. Eye</a>, <a href="#">Diction.com</a>, or <a href="#">Merriam-Webster</a>) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Academic-orientated websites <input type="checkbox"/> Non-academic-orientated websites</p> <p><input type="checkbox"/> Other (Please specify.) _____</p>					
<p>2. When I read course readings, I use online/ electronic resources (e.g. translation or PDF highlighter) to help me read the texts.</p>					
<p>2-1 What websites/ software have you used to help yourself read course readings so far? (You can choose more than 1 answer.)</p> <p><input type="checkbox"/> Translation websites/ software (e.g. <a href="#">Google Translate</a>, Dr. Eye’s instant translation or whole-text translation functions )</p> <p><input type="checkbox"/> Diagram/ flowchart websites/ software (e.g. use <a href="#">Gliffy</a>, <a href="#">Lucidchart</a>, or <a href="#">draw.io</a> similar websites/software to draw mind maps to help you understand big ideas of the texts)</p> <p><input type="checkbox"/> Read Aloud/Speech websites/ software (e.g. <a href="#">Natural Reader</a>) Note: Read Aloud/Speech software can read out load a text for a reader.</p> <p><input type="checkbox"/> Some functions in PDF software (e.g. use Adobe PDF or <a href="#">PDF XChanges Viewer</a> to highlight important parts and/or take notes)</p> <p><input type="checkbox"/> Other (Please specify.) _____</p>					
<p>2-2 What websites/ software do you often use to help yourself read course readings? (You can choose more than 1 answer.)</p> <p><input type="checkbox"/> Translation websites/ software (e.g. <a href="#">Google Translate</a>, Dr. Eye’s instant translation or whole-text translation functions )</p> <p><input type="checkbox"/> Diagram/ flowchart websites/ software (e.g. use <a href="#">Gliffy</a>, <a href="#">Lucidchart</a>, or <a href="#">draw.io</a> similar websites/software to draw mind maps to help you understand big ideas of the texts)</p> <p><input type="checkbox"/> Read Aloud/Speech websites/ software (e.g. <a href="#">Natural Reader</a>) Note: Read Aloud/Speech software can read out load a text for a reader.</p> <p><input type="checkbox"/> Some functions in PDF software (e.g. use Adobe PDF or <a href="#">PDF XChanges Viewer</a> to highlight important parts and/or take notes)</p> <p><input type="checkbox"/> Other (Please specify.) _____</p>					
<p>3. When I read course readings, I use online spaces (e.g. my personal blog, website, Wikispaces, or Google Doc) to take notes.</p>					
<p>4. I watch online videos (e.g. <a href="#">TEDTalks</a>) related to courses, my study, and</p>					

my specialities.					
5. I use online search engines to look for academic articles.					
5- 1 What search engines have you used to look for academic articles so far? (You can choose more than 1 answer.) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">OSU library's search engine</a> <input type="checkbox"/> <a href="#">OSU library's research databases</a> <input type="checkbox"/> Other (Please specify.) _____					
5-2 What search engines do you often use to look for academic articles? (You can choose more than 1 answer.) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">OSU library's search engine</a> <input type="checkbox"/> <a href="#">OSU library's research databases</a> <input type="checkbox"/> Other (Please specify.) _____					
6. I audio/video-record lectures or speeches to help myself understand what instructors or speakers said.					
7. When I attend class discussions, I use my laptop, tablet/ iPad, or cell phone to type what I want to say in English first and say it in class later.					
8. When I attend academic discussions or meetings (e.g. in class, conferences, or my department), I use my laptop, tablet/ iPad, or cell phone to go online to <b>search words, phrases, or terms</b> that people mention.					
9. When I attend academic discussions or meetings (e.g. in class, conferences, or my department), I use my laptop, tablet/iPad, or cell phone to <b>take notes</b> .					
	<b>Agree</b>	<b>Disagree</b>			
10. I participate more in online discussions than in face-to-face discussions.					
11. What are other applications involving technology have you used to help yourself participate in courses and academic activities so far?					

11 Qs + 6 sub-questions

### Papers/ Assignments of Courses

	Always 100 %	Often 75 %	Sometimes 50 %	Seldom 25 %	Never 0 %
1. I use reference/ bibliography software (e.g. <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> ) to help myself organize academic articles that I read.					
2. When I write academic papers/ assignments, I use online/ electronic resources to check English words, phrases, usages, or grammar.					
2-1 What online resources have you used to help yourself write academic papers/ assignments so far? (You can choose more than 1 answer.) <input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Visuwords</a> , <a href="#">Dr. Eye</a> , <a href="#">Diction.com</a> , or <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> Online English corpus (e.g. <a href="#">COCA</a> or <a href="#">Netspeak</a> ) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Online resources about English grammar <input type="checkbox"/> Other (Please specify.)					
2-2 What online resources do you often use to help yourself write academic papers/ assignments? (You can choose more than 1 answer.) <input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Visuwords</a> , <a href="#">Dr. Eye</a> , <a href="#">Diction.com</a> , or <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> Online English corpus (e.g. <a href="#">COCA</a> or <a href="#">Netspeak</a> ) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Online resources about English grammar <input type="checkbox"/> Other (Please specify.)					
3. When I write academic papers/ assignments, I read online citation resources (e.g. <a href="#">Purdue Online Writing Lab</a> ) to help myself write citations and a bibliography (e.g. APA, MLA, Chicago styles).					
4. When I write academic papers/ assignments, I use citation websites/ software (e.g. <a href="#">Citation Machine</a> , <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> ) to generate <a href="#">in-text citations</a> and <a href="#">a bibliography</a> for myself.					
5. When I write academic papers/ assignments, I write my ideas and texts in Chinese/my native language first and then use translation software/ websites to translate them into English.					
6. In preparation of my academic papers/ assignments, I use online resources to help myself gather information related to my papers/ assignments. (Note: information such as writing topics or ideas)					



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7. When I write academic papers/ assignments, I use plagiarism detector software/websites (e.g. <a href="#">Plag Tracker</a> ) to make sure that I don't plagiarize someone's work.					
8. When I write academic papers/ assignments, I use software to draw diagrams/ flowcharts (e.g. <a href="#">Gliffy</a> , <a href="#">Lucidchart</a> , or <a href="#">draw.io</a> ) to help myself write an outline first.					
9. When I write academic papers/ assignments, I rely on the spell and grammar checker in Microsoft Word to correct my writing errors.					
10. I use internet/ technology/ software to prepare and present my oral presentation(s) for courses.					
11. What are other applications involving technology have you used to help yourself write course assignments and academic papers so far?					

11Qs + 2 sub-questions

Total 42Qs + 10 sub-questions

\*\* Thank you for filling out the questionnaire!! If you would like to continue participating in my study (the follow-up data collection: interviews, observation, document collection, and a semester-long journal), please leave your contact information below. If you attend the follow-up process, you will receive \$20 or a gift as showing my appreciation for your participation.

Name: \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone No. (option): \_\_\_\_\_

## Survey for Students in the Pre-or-during candidacy exam Stage --Traditional Chinese Version

### 第一部份 個人背景資料

姓名：\_\_\_\_\_

性別： 女  男

年齡： 20 - 25  26 - 30  31 - 35  36 - 40  40 +

您的國籍？\_\_\_\_\_

您來美國多久了？ 0 至 1 年  1+ 至 2 年  2+ 至 3 年  3+ 至 4 年  4+ 至 5 年  5+ 至 6 年  6 年以  
上

您的 TOEFL 分數 (請填入您最近一次的 TOEFL CBT 或 TOEFL iBT 成績)：

TOEFL CBT (滿分 300)：\_\_\_\_\_或

TOEFL iBT (滿分 120)：\_\_\_\_\_

您目前攻讀碩士或博士學位？ 碩士  博士

您目前念的系所？\_\_\_\_\_

您唸此系所多久了？(若您碩士與博士就讀同一系所而且在美國就讀，請以您碩士和博士至目前為止已在美國就讀多久來回答。)

1+ - 6 個月  6+ 個月至 1 年  1+ 至 1 年半  1 年半以上至 2 年  2+ 至 3 年  3+ 至 4 年  4+ 至 5 年

5+ 至 6 年  6 年以上

請選擇您使用科技產品/ 網站/ 軟體從事以下用活動的舒適程度 (請考慮您常使用的科技產品、網站、軟體，例如：e-mail、手機、平板/iPad、電腦、網路社群、部落格、Twitter、Facebook、QQ、WeChat、Skype...等)。

	非常不舒適	不舒適	舒適	非常舒適	不適用/不清楚
與學校同學溝通					
與學校教授溝通					
與校外學者/學生溝通					
一般的英文閱讀 (例如：在網路上閱讀新聞、文章、小說、詩...等)					

一般的英文寫作 (例如：在 blog、Twitter、facebook 寫自己的評論或記錄生活事件)					
一般的英文聽力 (例如：看電視劇、新聞、影片或音樂)					
一般的英文交談 (例如：與朋友講手機、在 skype、QQ、facebook、WeChat 或在其他的社群網上作交談)					
學術上的英文閱讀 (例如：在網路上閱讀與自己學術相關的英文文章、貼文、或郵件)					
學術上的英文寫作 (例如：用電腦寫英文學術文章/作業, 或於網路上用英文寫相關的學術評論)					
學術上的英文聽力 (例如：在網路上看與自己學術有關的文影片、演講...等)					
學術上的英文交談 (例如：在網路社群上，用英文與他人談論與自己學術領域相關的話題)					

## 第二部份 使用網路/科技產品/軟體從事學術上相關的活動

**學術社群 (Academic communities)** (請考慮您常使用的科技產品、網路、網站的使用，例如：e-mail、手機、平板/iPad、電腦、網路社群、佈落格、Twitter、Facebook、QQ、WeChat、Skype...等)

	總是 100%	時常 75%	有時候 50%	很少 25%	從不 0%
1. 我在網路上寫關於自己的研究或閱讀過的學術文章之意見/看法 (例如：在個人的 blog、線上討論區、Wikispaces、facebook、或 Twitter 上做評論)。					
2. 我使用網路/ 科技產品/ 軟體 (例如：e-mail 或 Facebook) 與學校教授討論有關學術、課堂或作業的事情。					
2-1 您使用什麼網路/ 科技產品/ 軟體 (例如：e-mail 或 Facebook)來與學校教授討論有關學術、課堂或作業的事情? (可複選) <input type="checkbox"/> e-mail <input type="checkbox"/> 手機簡訊 <input type="checkbox"/> 手機通話 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat, or Skype) <input type="checkbox"/> 網路社群 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它 (請列出)					
3. 我使用網路/ 科技產品/ 軟體 (例如：e-mail 或 Facebook)與學校同學討論有關學術、課堂或作業的事情。					
3-1 您使用什麼網路/ 科技產品/ 軟體來與學校同學討論有關學術、課堂或作業的事情? (可複選) <input type="checkbox"/> E-mail <input type="checkbox"/> 手機簡訊 <input type="checkbox"/> 手機通話 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat, or Skype) <input type="checkbox"/> 網路社群 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它 (請列出)					
4. 我用網路/ 科技產品/ 軟體 (例如：Facebook、線上討論區、Twitter)與校外學者/學生討論有關學術的事情。					
4-1 您使用什麼網路/ 科技產品/ 軟體來與校外學者/學生討論有關學術、課堂或作業的事情? (可複選) <input type="checkbox"/> e-mail <input type="checkbox"/> 手機簡訊 <input type="checkbox"/> 手機通話 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat, or Skype) <input type="checkbox"/> 網路社群 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它 (請列出)					
	同意	不同意			
5. 我覺得透過網路/科技產品/軟體比面對面的方式，我更能清楚地用英文表達自己的想法或意見。					

6. 我覺得透過網路/科技產品/軟體討論有關學術、課堂或作業的事情，比面對面的方式學的更多。					
	總是 100%	時常 70%	有時候 50%	很少 20%	從不 0%
7. 我上網閱讀文章、貼文、資料來瞭解如何發表學術文章。					
8. 當參與學術會議(conferences)或活動時，我會使用相機、手機或平板/iPad 記錄演講者的 ppt 來幫助自己瞭解其演講內容。					
9. 參與學術討論或會議時 (例如：課堂上、學術會議上/conferences 上、系上)，我會使用手提電腦、平板或手機上網查教授、同學提到的單字、詞彙或知識。					
10. 參與學術討論或會議時 (例如：課堂上、學術會議/conferences 上、系上)，我會使用手提電腦、平板或手機來做筆記。					

### 課程/學術上的參與

	總是 100%	時常 75%	有時候 50%	很少 25%	從不 0%
1. 閱讀課程規定的學術文章，遇到不熟悉的字、詞、專業詞語或概念時，我會到網路上尋找更多的解釋來幫助自己了解文章內容。					
1-1 閱讀課程規定的學術文章，遇到不熟悉的字、詞、專業詞語或概念時，您曾經使用何種網路/電子資料來幫助自己了解文章內容? (可複選) <input type="checkbox"/> 線上英文字典或軟體 (例如： <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 學術網站 <input type="checkbox"/> 非學術網站 <input type="checkbox"/> 其它 (請列出) _____					
1-2 閱讀課程規定的學術文章，遇到不熟悉的字、詞、專業詞語或概念時，您常常使用何種網路/電子資料來幫助自己了解文章內容? (可複選) <input type="checkbox"/> 線上英文字典或軟體 (例如： <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 學術網站 <input type="checkbox"/> 非學術網站 <input type="checkbox"/> 其它 (請列出) _____					
2. 閱讀課程規定的學術文章，我會使用網路/軟體等 (例如：翻譯軟體、PDF					

畫重點功能)來幫助自己閱讀文章。					
<p>2-1 您曾經使用什麼網路/ 軟體來幫助自己閱讀文章? (可複選)</p> <p><input type="checkbox"/> 翻譯軟體/網站 (例如: <a href="#">Google Translate</a>、Dr. Eye 的即時翻譯或全文翻譯的功能)</p> <p><input type="checkbox"/> 示意圖和/或流程圖軟體/網站 (例如: 使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意圖/流程圖軟體畫/網站心智圖, 來幫助自己了解文章重點)</p> <p><input type="checkbox"/> Read Aloud/Speech 軟體或網站 (例如: <a href="#">Natural Reader</a>) 註解: Read Aloud/Speech 軟體為一種朗讀軟體, 可用英文讀出英文文章內容。</p> <p><input type="checkbox"/> PDF 閱讀軟體的某些功能 (例如: 使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 畫重點和做筆記)</p> <p><input type="checkbox"/> 其它 (請列出) _____</p>					
<p>2-2 您常常使用什麼網路/ 軟體來幫助自己閱讀文章? (可複選)</p> <p><input type="checkbox"/> 翻譯軟體/網站 (例如: <a href="#">Google Translate</a>、Dr. Eye 的即時翻譯或全文翻譯的功能)</p> <p><input type="checkbox"/> 示意圖和/或流程圖軟體/網站 (例如: 使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意圖/流程圖軟體畫/網站心智圖, 來幫助自己了解文章重點)</p> <p><input type="checkbox"/> Read Aloud/Speech 軟體或網站 (例如: <a href="#">Natural Reader</a>) 註解: Read Aloud/Speech 軟體為一種朗讀軟體, 可用英文讀出英文文章內容。</p> <p><input type="checkbox"/> PDF 閱讀軟體的某些功能 (例如: 使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 畫重點和做筆記)</p> <p><input type="checkbox"/> 其它 (請列出) _____</p>					
<p>3. 閱讀課程規定的學術文章時, 我會使用網路空間 (例如: 個人的 blog、網站、Wikispaces, Google Doc)來做筆記。</p>					
<p>4. 我上網觀看與自己學術領域、研究、專業有關的影片 (例如: <a href="#">TEDTalks</a>)。</p>					
<p>5. 我使用搜尋引擎來尋找學術文章。</p>					
<p>5-1 您曾經使用何種搜尋引擎來尋找學術文章? (可複選)</p> <p><input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">學校圖書館的搜尋引擎</a> <input type="checkbox"/> <a href="#">學校圖書館的資料庫</a></p> <p><input type="checkbox"/> 其它 (請列出常用的搜尋引擎) _____</p>					
<p>5-2 您常常使用何種搜尋引擎來尋找學術文章? (可複選)</p> <p><input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">學校圖書館的搜尋引擎</a> <input type="checkbox"/> <a href="#">學校圖書館的資料庫</a></p> <p><input type="checkbox"/> 其它 (請列出常用的搜尋引擎) _____</p>					
<p>6. 我會在課堂或演講中, 做錄音或錄影來幫助自己了解其內容。</p>					
<p>7. 參與課堂面對面討論時, 我會使用手提電腦、平板或手機用英文打出想說</p>					

的話，再口頭說出來。					
8. 參與學術討論或會議時 (例如：課堂上、學術會議上、系上)，我會使用手提電腦、平板或手機上網查教授、同學提到的單字、詞彙或知識。					
9. 參與學術討論或會議時 (例如：課堂上、學術會議上、系上)，我會使用手提電腦、平板或手機來做筆記。					
	同意	不同意			
10. 我參與線上討論的次數多於面對面的討論。					
11. 您還有透過其他網路/科技產品/軟體來幫助自己參與課程和學術上的活動嗎?若有，請敘述於下方?					

### 課程作業/報告

	總是 100%	時常 75%	有時候 50%	很少 25%	從不 0%
1. 我使用參考文獻/參考書目軟體(例如： <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> )來幫助自己整理讀過的學術文章。					
2. 寫學術文章/作業時，我會上網或使用電子資料來查英文字、詞、用語或文法。					
2-1 您曾經使用何種網路/電子資料來幫助自己寫學術文章/作業?(可複選) <input type="checkbox"/> 線上英文字典或軟體 (例如： <a href="#">Visuwords</a> 、 <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 線上英文語料庫 (例如： <a href="#">COCA</a> or <a href="#">Netspeak</a> ) <input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 線上有關英文文法的資料 <input type="checkbox"/> 其它					
2-2 您常常使用何種網路/電子資料來幫助自己寫學術文章/作業?(可複選) <input type="checkbox"/> 線上英文字典或軟體 (例如： <a href="#">Visuwords</a> 、 <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 線上英文語料庫 (例如： <a href="#">COCA</a> or <a href="#">Netspeak</a> ) <input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 線上有關英文文法的資料 <input type="checkbox"/> 其它					
3. 寫學術文章/作業時，我會上網查如何寫參考文獻的資料(例如： <a href="#">Purdue</a>					

<p><a href="#">Online Writing Lab</a>)來幫助自己寫參考文獻 (例如：APA, MLA, Chicago styles)。</p>					
<p>4. 寫學術文章/ 作業時，我會使用參考文獻軟體/ 網站 (例如：<a href="#">Citation Machine</a>, <a href="#">EndNote</a>, <a href="#">RefWorks</a> 或 <a href="#">Zotero</a>)來產生文中夾註(<a href="#">in-text citations</a>)和文末的參考文獻 (<a href="#">bibliography</a>)。</p>					
<p>5. 寫學術文章/ 作業時，我會先用母語/中文寫下自己的想法和文章內容，再用翻譯軟體翻譯成英文。</p>					
<p>6. 準備寫學術文章/ 作業時，我會上網搜集相關於文章/ 作業的資訊 (例如：寫作的題目或點子)。</p>					
<p>7. 寫學術文章/作業時，我會使用學術抄襲檢測軟體 (例如：<a href="#">Plag Tracker</a>)來確保自己所寫的部分沒有抄襲其他學者的文章。</p>					
<p>8. 寫學術文章/ 作業時，我會使用軟體畫示意圖或流程圖(例如：<a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a>)來幫助自己寫文章大綱。</p>					
<p>9. 寫學術文章/ 作業時，我會依賴 Microsoft Word 中的拼寫和文法檢查功能來幫助自己改正寫作中的錯誤。</p>					
<p>10. 我使用網路/ 科技產品/ 軟體來準備口頭報告與上台報告。</p>					
<p>11. 您還有透過其他網路/ 科技產品/ 軟體來幫助自己寫課程作業和報告嗎? 若有，請敘述於下方?</p>					

\*\*感謝您百忙之中填寫此問卷，若您參與進一步的資料搜集 (訪談、觀察、文件收集、日誌)，我們將提供\$20 或更超值精美禮品作為感謝!! 請留下您的聯絡資訊。

姓名：\_\_\_\_\_

E-mail: \_\_\_\_\_

電話(option)：\_\_\_\_\_



## Survey for Students in the Pre-or-during candidacy exam Stage --Simplified Chinese Version

### 第一部份 个人背景资料

姓名: \_\_\_\_\_

性别:  女  男

年龄:  20 - 25  26 - 30  31 - 35  36 - 40  40 +

您的国籍? \_\_\_\_\_

您来美国多久了?  0 至 1 年  1+ 至 2 年  2+ 至 3 年  3+ 至 4 年  4+ 至 5 年  5+ 至 6 年  6 年以  
上

您的 TOEFL 分数(请填入您最近一次的 TOEFL CBT 或 TOEFL iBT 成绩):

TOEFL CBT (满分 300): \_\_\_\_\_ 或

TOEFL iBT (满分 120): \_\_\_\_\_

您目前攻读硕士或博士学位?  硕士  博士

您目前念系所(graduate program)? \_\_\_\_\_

您于此 program 多久?

1+ 至 6 个月  6+ 个月 至 1 年  1+ 至 1 年半  1 年半以上 至 2 年  2+ 至 3 年  3+ 至 4 年  4+ 至 5 年

5+ 至 6 年  6 年以上

请选择在以下用途中，使用网络/科技产品/软件的感受...(请考虑您常使用的科技产品、网络、网站的使用，例如：e-mail、手机、平板/iPad、计算机、网络社群、博客、Twitter、Facebook、QQ、WeChat、Skype...等)

	很不适应	比较不适应	比较适应	很适应	不适用/不清楚
与学校同学沟通					
与学校教授沟通					
与校外学者/学生沟通					
<b>一般</b> 的 <b>英语阅读</b> (例如：读新闻和非专业书籍)					
一般的 <b>英语写作</b> (例如：在博客、Twitter、facebook、发帖或跟贴等)					

一般的 <u>英语听力</u> (例如: 看电视剧、新闻、影片或音乐)					
一般的 <u>英语交流</u> (例如: 与朋友通过手机聊天、在skype、QQ、facebook、WeChat 等上交流)					
<b>学术上的英语阅读</b> (例如: 在网络上阅读与自己学术领域相关的英文文章、贴子或邮件)					
学术上的 <u>英语写作</u> (例如: 用计算机撰写英语学术文章/作业, 或在网络上用英语写相关的学术评论)					
学术上的 <u>英语听力</u> (例如: 在网络上与与自己学术领域相关的英语影片、演讲...等)					
学术上的 <u>英语交流</u> (例如: 在社交网络上与其他人用英语谈论与自己学术领域相关的话题)					

第二部份 使用网络/科技产品/软件从事与学术相关的活动

**学术社群 (Academic Communities)** (请考虑您常使用的科技产品、网络、网站的使用, 例如: e-mail、手机、平板/iPad、计算机、网络社群、博客、Twitter、Facebook、QQ、WeChat、Skype...等)

	总是 100%	时常 75%	有时候 50%	很少 25%	从不 0%
11. 我在网络上写有关于自己的研究或阅读过的学术文章之意见/看法 (例如: 在个人的博客、bbs、Wikispaces、facebook 或 Twitter 上做评论)。					
12. 我使用网络/科技产品/软件 (例如: e-mail 或 Facebook) 和 <b>学校教授</b> 讨论有关学术、课堂或作业的事情。					
2-1 您使用什麼网络/科技产品/软件和学校教授讨论有关学术、课堂或作业的事情? <input type="checkbox"/> e-mail <input type="checkbox"/> 手机短讯 <input type="checkbox"/> 手机通话 <input type="checkbox"/> 即時通訊 App (例如: Line, QQ, WeChat/微信, or Skype) <input type="checkbox"/> 社交网络 (例如: facebook, blogs, online forums, Wikispaces, 或 Twitter) <input type="checkbox"/> 其它 (請列出) _____					
13. 我使用网络/科技产品/软件和 <b>学校同学</b> 讨论有关学术、课堂或作业的事情。					
3-1 您使用什麼网络/科技产品/软件和学校同学讨论有关学术、课堂或作业的事情? <input type="checkbox"/> e-mail <input type="checkbox"/> 手机短讯 <input type="checkbox"/> 手机通话 <input type="checkbox"/> 即時通訊 App (例如: Line, QQ, WeChat/微信, or Skype)					

<input type="checkbox"/> 社交网络 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它 (請列出)_____					
14. 我使用网络/科技产品/软件和校外学者/学生讨论有关学术、课堂或作业的事情。					
4-1 您使用什麼网络/科技产品/软件和校外学者/学生讨论有关学术、课堂或作业的事情?					
<input type="checkbox"/> e-mail <input type="checkbox"/> 手机短讯 <input type="checkbox"/> 手机通话 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat/微信, or Skype)					
<input type="checkbox"/> 社交网络 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它 (請列出)_____					
	同意	不同意			
15. 我觉得通过网络/科技产品/软件比面对面的方式，更能清楚的用英语表达自己的想法或意见。					
16. 我觉得通过网络/科技产品/软件谈论学术、课堂或作业的事情，比面对面的方式学的更多。					
	总是 100%	时常 75%	有时候 50%	很少 25%	从不 0%
17. 我上网阅读文章、贴子或资料来瞭解如何发表学术文章。					
18. 参与学术会议(conferences)或学术活动时，我会使用相机、平板或手机来记录学/演讲者的 ppt 来帮助自己瞭解其演讲内容。					
19. 参与学术讨论或会议时(例如：课堂上、学术会议/conferences 上、研究学院上) 我会使用手提电脑、平板或手机来上网查教授、同学提到的单字、词汇或知识。					
20. 参与学术讨论或会议时 (例如：课堂上、学术会议/conferences 上、研究学院上) 我会使用手提电脑、平板或手机来做笔记。					

课程/学术上的参与

	总是 100%	时常 75%	有时候 50%	很少 25%	从不 0%
1. 阅读课堂规定的学术文章，遇到不熟悉字、词、专业词语或概念时，我会上网查更多的解释来帮助我了解文章内容。					

<p>1-1 阅读课程规定的学术文章, 遇到不熟悉的字、词、专业词语或概念时, 您<b>曾经</b>使用何种网络/电子数据来帮助自己了解文章内容?(可复选)</p> <p><input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典)</p> <p><input type="checkbox"/> 学术网站 <input type="checkbox"/> 非学术网站(例如: 百度、谷歌、维基百科) <input type="checkbox"/> 其它(请列出) _____</p>					
<p>1-2 阅读课程规定的学术文章, 遇到不熟悉的字、词、专业词语或概念时, 您<b>常</b>使用何种网络/电子数据来帮助自己了解文章内容?(可复选)</p> <p><input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典)</p> <p><input type="checkbox"/> 学术网站 <input type="checkbox"/> 非学术网站(例如: 百度、谷歌、维基百科) <input type="checkbox"/> 其它(请列出) _____</p>					
<p>2. 阅读课程规定的学术文章时, 我会使用网络/ 软件等 (例如: 翻译软件、PDF 画重点功能)来帮助自己阅读文章内容。</p>					
<p>2-1 您<b>曾经</b>使用什么网络/ 软件来帮助自己阅读文章内容?(可复选)</p> <p><input type="checkbox"/> 翻译软件/ 网站 (例如: <a href="#">Google Translate</a>、Dr. Eye 的实时翻译或全文翻译的功能)</p> <p><input type="checkbox"/> 示意图和/或流程图软件/ 网站 (例如: 使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意图/流程图软件画心智图, 来帮助自己了解文章重点)</p> <p><input type="checkbox"/> Read Aloud/Speech 软件或网站 (例如: <a href="#">Natural Reader</a>) 批注: Read Aloud/Speech 软件为一种朗读软件, 可用英文读出英文文章内容。</p> <p><input type="checkbox"/> PDF 阅读软件的某些功能 (例如: 使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 画重点和做笔记)</p> <p><input type="checkbox"/> 其它 (请列出) _____</p>					
<p>2-2 您<b>常</b>使用什么网络/ 软件来帮助自己阅读文章内容?(可复选)</p> <p><input type="checkbox"/> 翻译软件/ 网站 (例如: <a href="#">Google Translate</a>、Dr. Eye 的实时翻译或全文翻译的功能)</p> <p><input type="checkbox"/> 示意图和/或流程图软件/ 网站 (例如: 使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意图/流程图软件画心智图, 来帮助自己了解文章重点)</p> <p><input type="checkbox"/> Read Aloud/Speech 软件或网站 (例如: <a href="#">Natural Reader</a>) 批注: Read Aloud/Speech 软件为一种朗读软件, 可用英文读出英文文章内容。</p> <p><input type="checkbox"/> PDF 阅读软件的某些功能 (例如: 使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 画重点和做笔记)</p> <p><input type="checkbox"/> 其它 (请列出) _____</p>					
<p>3. 阅读课程规定的学术文章时, 我会使用网络空间 (例如: 个人的 blog、网</p>					

站、Wikispaces, Google Doc) 来做笔记。					
4. 我上网看与自己学术领域、研究、专业相关的影片(例如: <a href="#">TEDTalks</a> )。					
5. 我使用搜索引擎来搜索学术文章。					
5-1 您曾经使用何种搜寻引擎来寻找学术文章?(可复选) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">学校图书馆的搜寻引擎</a> <input type="checkbox"/> <a href="#">学校图书馆的数据库</a> <input type="checkbox"/> 其它(请列出常用的搜寻引擎) _____					
5-2 您常使用何种搜寻引擎来寻找学术文章?(可复选) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">学校图书馆的搜寻引擎</a> <input type="checkbox"/> <a href="#">学校图书馆的数据库</a> <input type="checkbox"/> 其它(请列出常用的搜寻引擎) _____					
6. 我会在课堂上或演讲中做录音或录像来帮助自己了解其内容。					
7. 参与课堂面对面的讨论时, 我会使用手提电脑、平板或手机用英语打出想说的话, 再口头说出来。					
8. 参与学术讨论或会议时(例如: 课堂上、学术会议上、系上), 我会使用手提电脑、平板或手机上网查教授、同学提到的单字、词汇或知识。					
9. 参与学术讨论或会议时(例如: 课堂上、学术会议上、系上), 我会使用手提电脑、平板或手机来做笔记。					
	同意	不同意			
10. 我参与在线讨论的次数多于面对面的讨论。					
11. 您还有透过其它网络/ 科技产品/ 软件来帮助自己参与课程和学术有关的活动吗?若有, 请叙述于下方?					

### 课程作业/报告

	总是 100%	时常 75%	有时候 50%	很少 25%	从不 0%
1. 我使用参考文献 / 参考书目软件 (例如: <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> ) 来帮助自己整理读过的学术文章。					

2. 写学术文章/作业时，我会上网或使用电子数据来查英文字、词、用语和文法。					
2-1 您曾经使用何种网络/ 电子数据来帮助自己写学术文章/ 作业? (可复选) <input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Visuwords</a> 、 <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 在线英文语料库 (例如: <a href="#">COCA</a> or <a href="#">Netspeak</a> ) <input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典) <input type="checkbox"/> 在线有关英语文法的资料 <input type="checkbox"/> 其它(请列出)					
2-2 您常使用何种网络/ 电子数据来帮助自己写学术文章/ 作业? (可复选) <input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Visuwords</a> 、 <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 在线英文语料库 (例如: <a href="#">COCA</a> or <a href="#">Netspeak</a> ) <input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典) <input type="checkbox"/> 在线有关英语文法的资料 <input type="checkbox"/> 其它(请列出)					
3. 写学术文章/ 作业时，我会上网查有关参考文献格式的信息(例如: <a href="#">Purdue Online Writing Lab</a> )来帮助自己写参考文献格式 (例如: APA, MLA, Chicago styles).					
4. 写学术文章/ 作业时，我会使用参考文献软件/网站 (例如: <a href="#">EndNote</a> , <a href="#">RefWorks</a> 或 <a href="#">Zotero</a> )来产生文中引用(in-text citations)和文末的参考文献(bibliography)。					
5. 写学术文章/ 作业时，我会先用母语/中文写下自己的想法和文章内容，再用翻译软件翻译成英语。					
6. 写学术文章/ 作业时，我会上网搜集关于学术文章/ 作业的信息(例如: 写作的题目或点子)。					
7. 写学术文章/ 作业时，我会使用学术抄袭检测软件(例如: <a href="#">Plag Tracker</a> )来确保自己所写的部分没有抄袭其他学者的文章。					
8. 写学术文章/ 作业时，我会使用软件画示意图或流程图 (例如: <a href="#">Gliffy</a> 、 <a href="#">Lucidchart</a> 、 <a href="#">draw.io</a> )来帮助自己写文章提纲。					
9. 写学术文章/ 作业时，我会依赖 Microsoft Word 中的拼写和文法检查功能来帮助自己改正写作中的错误。					
10. 我使用网络/ 科技产品/ 软件来准备与上台 presentation 。					

11. 您还有透过其它网络/ 科技产品/ 软件来帮助自己写课程作业和报告吗? 若有, 请叙述于下方。

\*\*感谢您在百忙之中填写我们的问卷, 若您参加进一步的资料搜集过程 (访谈、观察、文件收集、日志), 于资料搜集的结尾我们将提供\$30 或更超值精美礼品作为感谢!! 若您有兴趣继续参与此研究, 请留下您的联系方式。

姓名: \_\_\_\_\_

E-mail: \_\_\_\_\_

电话(option): \_\_\_\_\_

**Supplement 3-4 Survey for Students in the Post-Candidacy-Exam Stage**

**English Version**

**Section 1 Background Information**

Name: \_\_\_\_\_

Gender:  female  male

Age:  20 - 25  26 - 30  31 - 35  36 - 40  40 +

Which country are you from? \_\_\_\_\_

How long have you been living in the U.S.?

0 - 1 year  1+ to 2 years  2+ to 3 years  3+ to 4 years  4+ to 5 years  5+ to 6 years  6 years above

Your TOEFL score (Please fill out your **latest** TOEFL CBT or TOEFL iBT score) :

TOEFL CBT (the score range: 0 ~ 300) : \_\_\_\_\_ or

TOEFL iBT (the score range: 0 ~ 120) : \_\_\_\_\_

Are you currently pursuing a master's or PhD degree? :  master  PhD

Which school and academic program are you studying now? \_\_\_\_\_

How long have you been studying in your academic program? (If your master and PhD program are in the same academic field and in the U.S., please include the year(s) in the past.)

1 - 6 months  6+ months to 1 year  1+ to 1.5 years  1.5+ to 2 years  2+ to 3 years  3+ to 4 years

4+ to 5 years  5+ to 6 years  6 years above

**How comfortable are you in using technology to do following tasks? Please consider some forms of technology. (e.g. e-mail, a cell phone, a tablet/iPad, a computer, social media, a blog, Twitter, Facebook, QQ, WeChat, Skype...)**

	Very uncomfortable	Uncomfortable	Comfortable	Very Comfortable	Not Applicable/ Not Sure
communicate with peers in school					
communicate with professors in school					
communicate with scholars or students outside of the school					
do <b>non-academic reading</b> (e.g. read news, articles, fiction, poetry, or messages online)					



do non-academic <i>writing</i> (e.g. write comments or diaries online)					
do non-academic <i>listening</i> (e.g. watch TV shows, news, or videos or listen to music)					
do non-academic <i>speaking</i> (e.g. chat with friends through Skype or QQ)					
do <b>academic</b> <i>reading</i> (e.g. read online academic articles, postings, or list-serv)					
do <b>academic</b> <i>writing</i> (e.g. write an academic paper, assignment, or comments online)					
do <b>academic</b> <i>listening</i> (e.g. watch academic related videos and speeches online)					
do <b>academic</b> <i>speaking</i> (e.g. discuss academic related topics with peers/professors/scholars on social media)					

## Section 2 Technology Use for Academic Purposes

**Academic Communities** Please consider some forms of technology. (e.g. e-mail, a cell phone, a tablet/iPad, a computer, social media, a blog, Twitter, Facebook, QQ, WeChat, Skype...)

	Always 100 %	Often 75 %	Sometimes 50 %	Seldom 25 %	Never 0 %
1. I write my thoughts/ ideas/ opinions related to my study or academic readings in online spaces (e.g. a personal blog, online forums, my Wikispaces, facebook, or Twitter).					
2. When I face difficulty in writing academic papers/ proposals/ candidacy exam/ dissertation, I consult with classmates or other scholars/ students outside of the school online.					
3. I use online resources to help myself understand how to publish academic articles.					
4. I use technology (e.g. e-mail or Facebook) to discuss research or academic issues with <b>professors in school</b> .					

4-1 What types of technology do you use to discuss research or academic issues with professors in school? (You can choose more than 1 answer.) <input type="checkbox"/> E-mail <input type="checkbox"/> Cell phone texts <input type="checkbox"/> Cell phone Calls <input type="checkbox"/> Communicative Apps (e.g. Line, QQ, WeChat, or Skype) <input type="checkbox"/> Social media sites (e.g. facebook, blogs, online forums, Wikispaces, or Twitter ) <input type="checkbox"/> Other (Please specify.)					
5. I use technology (e.g. E-mail or Facebook) to discuss research or academic issues with <b>peers in school</b> .					
5-1 What types of technology do you use to discuss research or academic issues with peers in school? (You can choose more than 1 answer.) <input type="checkbox"/> E-mail <input type="checkbox"/> Cell phone texts <input type="checkbox"/> Cell phone Calls <input type="checkbox"/> Communicative Apps (e.g. Line, QQ, WeChat, or Skype) <input type="checkbox"/> Social media sites (e.g. facebook, blogs, online forums, Wikispaces, or Twitter ) <input type="checkbox"/> Other (Please specify.)					
6. I use technology (e.g. Facebook, online forums, or Twitter) to discuss research or academic issues with <b>scholars/ students outside of the school</b> .					
6-1 What types of technology do you use to discuss research or academic issues with scholars/ students outside of the school? (You can choose more than 1 answer.) <input type="checkbox"/> E-mail <input type="checkbox"/> Cell phone texts <input type="checkbox"/> Cell phone Calls <input type="checkbox"/> Communicative Apps (e.g. Line, QQ, WeChat, or Skype) <input type="checkbox"/> Social media sites (e.g. facebook, blogs, online forums, Wikispaces, or Twitter ) <input type="checkbox"/> Other (Please specify.)					
	<b>Agree</b>	<b>Disagree</b>			
7. I feel I can express my ideas/ opinions in English much clearer in online environments than in face-to-face situations.					
8. I feel I learn more through using online environments to discuss research or academic issues than through the face-to-face method.					
9. I participate more in online discussions than in face-to-face discussions.					
	<b>Always 100 %</b>	<b>Often 75 %</b>	<b>Sometimes 50 %</b>	<b>Seldom 25 %</b>	<b>Never 0 %</b>
10. I use internet/ technology/ software to prepare and present my oral presentation(s) for conferences or workshops.					

11. When I attend academic discussions or meetings (e.g. in conferences or my department), I use my laptop, tablet/iPad, or cell phone to go online <b>to search words, phrases, or terms</b> that speakers/ people mention.					
12. When I attend academic discussions or meetings (e.g. in conferences or my department), I use my laptop, tablet/iPad, or cell phone to <b>take notes</b> .					
13. When I attend academic conferences/ events, I use my camera, cell phone, or tablet/iPad to capture scholars' slides to help myself understand what the scholars said.					
14. I audio/video-record speeches to help me understand what speakers said.					
15. What other applications involving technology have you used to help yourself to participate in academic communities so far?					

15Qs + 3 sub-Qs

### Research and Academic Learning

	Always 100 %	Often 75 %	Sometimes 50 %	Seldom 25 %	Never 0%
1. I watch online videos (e.g. <a href="#">TEDTalks</a> ) related to my study, disciplinary knowledge, and specialities.					
2. I use online search engines to look for academic articles.					
2-1 What search engines <b>have you used</b> to look for academic articles <b>so far?</b> (You can choose more than 1 answer.) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">OSU library's search engine</a> <input type="checkbox"/> <a href="#">OSU library's research databases</a> <input type="checkbox"/> Other (Please specify) _____					
2-2 What search engines <b>do you often use</b> to look for academic articles? (You can choose more than 1 answer.) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">OSU library's search engine</a> <input type="checkbox"/> <a href="#">OSU library's research databases</a> <input type="checkbox"/> Other (Please specify) _____					
3. When I read academic texts and find unfamiliar words, terms, or concepts, I search online/ electronic resources to find more explanations					

to help myself understand the texts.					
<p>3-1 What online/ electronic resources <b>have you used so far</b> to help yourself understand academic texts when finding unfamiliar words, terms, or concepts? (You can choose more than 1 answer.)</p> <p><input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Dr. Eye</a>, <a href="#">Diction.com</a>, or <a href="#">Merriam-Webster</a>) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Academic-orientated websites <input type="checkbox"/> Non-academic-orientated websites</p> <p><input type="checkbox"/> Other (Please specify.) _____</p>					
<p>3-2 What online/ electronic resources <b>do you often use</b> to help yourself understand academic texts when finding unfamiliar words, terms, or concepts? (You can choose more than 1 answer.)</p> <p><input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Dr. Eye</a>, <a href="#">Diction.com</a>, or <a href="#">Merriam-Webster</a>) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Academic-orientated websites <input type="checkbox"/> Non-academic-orientated websites</p> <p><input type="checkbox"/> Other (Please specify.) _____</p>					
4. When I read academic texts, I use websites/ software (e.g. translation or PDF highlighter) to help myself read the texts.					
<p>4-1 What websites/ software <b>have you used</b> to help yourself read academic texts <b>so far</b>? (You can choose more than 1 answer.)</p> <p><input type="checkbox"/> Translation websites/ software (e.g. <a href="#">Google Translate</a>, Dr. Eye’s instant translation or whole-text translation functions )</p> <p><input type="checkbox"/> Diagram/ flowchart websites/ software (e.g. <a href="#">Gliffy</a>, <a href="#">Lucidchart</a>, or <a href="#">draw.io</a>) similar websites/ software to draw mind maps to help you understand big ideas of the texts)</p> <p><input type="checkbox"/> Read Aloud/Speech websites/ software (e.g. <a href="#">Natural Reader</a>) Note: Read Aloud/Speech software can read out load a text for a reader.</p> <p><input type="checkbox"/> Some functions in PDF software (e.g. Adobe PDF or <a href="#">PDF XChanges Viewer</a> to highlight important parts and/or take notes)</p> <p><input type="checkbox"/> Other (Please specify.) _____</p>					
<p>4-2 What websites/ software <b>do you often use</b> to help yourself read academic texts? (You can choose more than 1 answer.)</p> <p><input type="checkbox"/> Translation websites/ software (e.g. <a href="#">Google Translate</a>, Dr. Eye’s instant translation or whole-text translation functions )</p> <p><input type="checkbox"/> Diagram/ flowchart websites/ software (e.g. <a href="#">Gliffy</a>, <a href="#">Lucidchart</a>, or <a href="#">draw.io</a>) similar websites/ software to draw mind maps to help you understand big ideas of the texts)</p> <p><input type="checkbox"/> Read Aloud/Speech websites/ software (e.g. <a href="#">Natural Reader</a>) Note: Read Aloud/Speech software can read out load a text for a reader.</p> <p><input type="checkbox"/> Some functions in PDF software (e.g. Adobe PDF or <a href="#">PDF XChanges Viewer</a> to highlight important parts and/or take notes)</p> <p><input type="checkbox"/> Other (Please specify.) _____</p>					

5. When I read academic texts, I use online spaces (e.g. my personal blog, website, Wikispaces, or Google Doc) to take notes.					
6. I use reference/bibliography software (e.g. <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> ) to help myself organize academic articles that I read.					
7. When I write academic papers/ proposals/ candidacy exam/ my dissertation, I read online citation resources (e.g. <a href="#">Purdue Online Writing Lab</a> ) to help myself write citations and a bibliography (e.g. APA, MLA, Chicago styles).					
8. When I write academic papers/ proposals/ candidacy exam/ my dissertation, I use citation websites/ software (e.g. <a href="#">Citation Machine</a> , <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> ) to generate <a href="#">in-text citations</a> and a <a href="#">bibliography</a> for me.					
9. When I write academic papers/ proposals/ candidacy exam/ my dissertation, I use online/ electronic resources to check English words, phrases, usages, or grammar.					
<p>9-1 What online/ electronic resources <b>have you used</b> to help yourself write academic papers/ proposals/ candidacy exam/ your dissertation <b>so far</b>?          (You can choose more than 1 answer.)  <input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Visuwords</a>, <a href="#">Dr. Eye</a>, <a href="#">Diction.com</a>, or <a href="#">Merriam-Webster</a>)  <input type="checkbox"/> Online English corpus (e.g. <a href="#">COCA</a> or <a href="#">Netspeak</a>) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Online resources about English grammar <input type="checkbox"/> Other (Please specify.)</p>					
<p>9-2 What online/ electronic resources <b>do you often use</b> to help yourself write academic papers/ proposals/ candidacy exam/ your dissertation?          (You can choose more than 1 answer.)  <input type="checkbox"/> Online English dictionaries/ software (e.g. <a href="#">Visuwords</a>, <a href="#">Dr. Eye</a>, <a href="#">Diction.com</a>, or <a href="#">Merriam-Webster</a>)  <input type="checkbox"/> Online English corpus (e.g. <a href="#">COCA</a> or <a href="#">Netspeak</a>) <input type="checkbox"/> Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries) <input type="checkbox"/> Online resources about English grammar <input type="checkbox"/> Other (Please specify.)</p>					
10. When I write academic papers/ proposals/ candidacy exam/ my dissertation, I write my ideas and texts in Chinese/my native language first and then use translation software/websites to translate them into					

English.					
11. When I write academic papers/ proposals/ candidacy exam/ my dissertation, I use plagiarism detector software/websites (e.g. <a href="#">Plag Tracker</a> ) to make sure that I don't plagiarize someone's work.					
12. When I write academic papers/ proposals/ candidacy exam/ my dissertation, I use software to draw diagrams/flowcharts (e.g. <a href="#">Gliffy</a> , <a href="#">Lucidchart</a> , or <a href="#">draw.io</a> ) to help myself write an outline first.					
13. When I write academic papers/ proposals/ candidacy exam/ my dissertation, I rely on the spell and grammar checker in Microsoft Word to correct my writing errors.					
14. What are other applications involving technology have you used to help yourself learn academic knowledge and write academic papers/ proposals/ candidacy exam/ your dissertation?					

14Qs + 8 sub-Qs  
 Total: 39Qs

\*\* Thank you for filling out the questionnaire!! If you would like to continue participating in my study (the follow-up data collection: interviews, observation, document collection, and a semester-long journal), please leave your contact information below. If you attend the follow-up process, you will receive \$20 or a gift as showing my appreciation for your participation.

Name: \_\_\_\_\_  
 E-mail: \_\_\_\_\_  
 Phone No. (option): \_\_\_\_\_

**Survey for Students in the Post-candidacy-exam Stage -- Traditional Chinese Version**

**第一部份 個人背景資料**

姓名：\_\_\_\_\_

性別： 女  男

年齡： 20 - 25  26 - 30  31 - 35  36 - 40  40 +

您的國籍？\_\_\_\_\_

您來美國多久了？ 0 至 1 年  1+年至 2 年  2+年至 3 年  3+年至 4 年  4+年至 5 年  
 5+年至 6 年  6 年以上

您的 TOEFL 分數 (請填入您最近一次的 TOEFL CBT 或 TOEFL iBT 成績)：

TOEFL CBT (滿分 300)：\_\_\_\_\_或

TOEFL iBT (滿分 120)：\_\_\_\_\_

您目前攻讀碩士或博士學位？ 研究所  博士班

您目前念的學校與系所？\_\_\_\_\_

您唸此系所多久？

1+ 至 6 個月  6+個月至 1 年  1+至 年 1 年半  1 年半以上至 2 年  2+年至 3 年  3+年至 4 年  4+年至 5 年  5+年至 6 年  6 年以上

請選擇您使用科技產品/ 網站/ 軟體從事以下用活動的舒適程度 (請考慮您常使用的科技產品、網站、軟體，例如：e-mail、手機、平板/iPad、電腦、網路社群、佈落格、Twitter、Facebook、QQ、WeChat、Skype...等)。

	非常不舒適	不舒適	舒適	非常舒適	不適用/不清楚
與學校同學溝通					
與學校教授溝通					
與校外學者/學生溝通					
一般的英文閱讀 (例如：在網路上閱讀新聞、文章、小說、詩..等)					

一般的英文寫作 (例如：在 blog、Twitter、facebook 寫自己的評論或記錄生活事件)					
一般的英文聽力 (例如：看電視劇、新聞、影片或音樂)					
一般的英文交談 (例如：與朋友講手機、在 skype、QQ、facebook、WeChat 或其他的社群網上作交談)					
學術上的英文閱讀 (例如：在網路上閱讀與自己學術相關的英文文章、貼文、或郵件)					
學術上的英文寫作 (例如：用電腦寫英文學術文章/作業, 或於網路上用英文寫相關的學術評論)					
學術上的英文聽力 (例如：在網路上看與自己學術有關的文影片、演講...等)					
學術上的英文交談 (例如：在網路社群上，用英文與他人談論與自己學術領域相關的話題)					

## 第二部份 使用網路/科技產品/軟體從事學術上相關的活動

**學術社群 (Academic communities)** (請考慮您常使用的科技產品、網路、網站的使用，例如：e-mail、手機、平板/iPad、電腦、網路社群、佈落格、Twitter、Facebook、QQ、WeChat、Skype...等)

	總是 100%	時常 75%	有時候 50%	很少 25%	從不 0%
21. 我在網路上寫關於自己的研究或讀過的學術文章之意見/看法 (例如：在個人的 blog、線上討論區、Wikispaces、facebook 或 Twitter 上做評論)。					
22. 當我在寫學術文章/論文研究提案/資格考試/論文遇到困難時，我會上網詢問同學或其他校外學者/學生的看法/建議。					
23. 我上網閱讀文章、貼文、資料來了解如何發表學術文章。					
24. 我使用網路/科技產品/軟體與學校教授討論有關研究或學術相關的事情。					
4-1 您使用什麼網路/科技產品/軟體來與學校教授討論有關研究或學術相關的事情? <input type="checkbox"/> e-mail <input type="checkbox"/> 手機簡訊 <input type="checkbox"/> 手機通話 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat, or Skype)					



<input type="checkbox"/> 網路社群 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它_____					
25. 我使用網路/科技產品/軟體與 <b>學校同學</b> 討論有關研究或學術相關的事情。					
5-1 您使用什麼網路/科技產品/軟體來與學校同學討論有關研究或學術相關的事情? <input type="checkbox"/> e-mail <input type="checkbox"/> 手機簡訊 <input type="checkbox"/> 手機通話 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat, or Skype) <input type="checkbox"/> 網路社群 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它_____					
26. 我用網路/科技產品/軟體與 <b>校外學者/學生</b> 討論有關研究或學術相關的事情。					
6-1 您使用什麼網路/科技產品/軟體來與校外學者/學生討論有關研究或學術相關的事情? <input type="checkbox"/> e-mail <input type="checkbox"/> 手機簡訊 <input type="checkbox"/> 手機通話 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat, or Skype) <input type="checkbox"/> 網路社群 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它_____					
27. 我使用網路/科技/軟體來準備學術會議(conferences)或研討會(workshops)的口頭報告與上台報告。					
28. 參與學術討論時 (例如：課堂上、學術會議上/conferences 上、系上)，我會使用手提電腦、平板或手機上網查教授、同學、參與者提到的單字、詞彙或知識。					
29. 參與學術討論時 (例如：課堂上、學術會議/conferences 上、系上)，我會使用手提電腦、平板或手機來 <b>做筆記</b> 。					
30. 參與學術會議(conferences)或活動時，我會使用相機、手機或平版/iPad 記錄演講者的 ppt 來幫助自己了解其演講內容。					
31. 我會在演講中做錄音或錄影來幫助自己了解其內容。					
	同意	不同意			
32. 我覺得透過網路/科技產品/軟體比面對面的方式，我更能清楚地用英文表達自己的想法或意見。					
33. 我覺得透過網路/科技產品/軟體討論有關研究或學術相關的事情，比面對面的方式學的更多。					
34. 我參與線上討論的次數多於面對面的討論。					
35. 您還有透過其他網路/科技產品/軟體來幫助自己參與學術社群(academic communities)嗎? 若有，請敘述					

於下方?

**研究和學術上的學習**

	總是 100%	時常 75%	有時候 50%	很少 25%	從不 0%
12. 我上網觀看與自己學術領域、研究、專業有關的影片 (例如： <a href="#">TEDTalks</a> )。					
13. 我使用搜尋引擎來尋找學術文章。					
2-1 您曾經使用何種搜尋引擎來尋找學術文章? (可複選) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">學校圖書館的搜尋引擎</a> <input type="checkbox"/> <a href="#">學校圖書館的資料庫</a> <input type="checkbox"/> 其它 (請列出常用的搜尋引擎) _____					
2-2 您常常使用何種搜尋引擎來尋找學術文章? (可複選) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">學校圖書館的搜尋引擎</a> <input type="checkbox"/> <a href="#">學校圖書館的資料庫</a> <input type="checkbox"/> 其它 (請列出常用的搜尋引擎) _____					
14. 閱讀學術文章遇到不熟悉的字、詞、專業詞語或概念時，我會到網路上尋找更多的解釋來幫助自己了解文章內容。					
3-1 閱讀學術文章遇到不熟悉的字、詞、專業詞語或概念時，您曾經使用何種網路/電子資料來幫助自己了解文章內容? (可複選) <input type="checkbox"/> 線上英文字典或軟體 (例如： <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 學術網站 <input type="checkbox"/> 非學術網站 <input type="checkbox"/> 其它 _____					
3-2 閱讀學術文章遇到不熟悉的字、詞、專業詞語或概念時，您常常使用何種網路/電子資料來幫助自己了解文章內容? (可複選) <input type="checkbox"/> 線上英文字典或軟體 (例如： <a href="#">Dr. Eye</a> 、 <a href="#">Diction.com</a> 、 <a href="#">Merriam-Webster</a> ) <input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 學術網站 <input type="checkbox"/> 非學術網站 <input type="checkbox"/> 其它 _____					
15. 閱讀學術文章時，我會使用網站/軟體 (例如：翻譯軟體、PDF 畫重點功能)來幫助自己閱讀文章。					

<p>4-1 您<b>曾經</b>使用什麼網路/ 軟體來幫助自己閱讀文章? (可複選)</p> <p><input type="checkbox"/> 翻譯軟體/ 網站 (例如：<a href="#">Google Translate</a>、Dr. Eye 的即時翻譯或全文翻譯的功能)</p> <p><input type="checkbox"/> 示意圖和/或流程圖軟體 (例如：使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意圖/流程圖軟體畫心智圖，來幫助自己了解文章重點)</p> <p><input type="checkbox"/> Read Aloud/Speech 軟體或網站 (例如：<a href="#">Natural Reader</a>) 批註：Read Aloud/Speech 軟體為一種朗讀軟體，可用英文讀出文章內容。</p> <p><input type="checkbox"/> PDF 閱讀軟體的某些功能 (例如：使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 畫重點和做筆記)</p> <p><input type="checkbox"/> 其它 _____</p>					
<p>4-2 您<b>常常</b>使用什麼網路/ 軟體來幫助自己閱讀文章? (可複選)</p> <p><input type="checkbox"/> 翻譯軟體/ 網站 (例如：<a href="#">Google Translate</a>、Dr. Eye 的即時翻譯或全文翻譯的功能)</p> <p><input type="checkbox"/> 示意圖和/或流程圖軟體 (例如：使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意圖/流程圖軟體畫心智圖，來幫助自己了解文章重點)</p> <p><input type="checkbox"/> Read Aloud/Speech 軟體或網站 (例如：<a href="#">Natural Reader</a>) 批註：Read Aloud/Speech 軟體為一種朗讀軟體，可用英文讀出文章內容。</p> <p><input type="checkbox"/> PDF 閱讀軟體的某些功能 (例如：使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 畫重點和做筆記)</p> <p><input type="checkbox"/> 其它 _____</p>					
16.	閱讀學術文章時，我會使用網路空間 (例如：個人的 blog、網站、Wikispaces, Google Doc)來做筆記。				
17.	我使用 <b>參考文獻 / 參考書目軟體</b> (例如： <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> )來幫助自己整理讀過的學術文章。				
18.	寫學術文章/ 論文研究提案/ 資格考試/ 論文時，我會上網查如何寫參考文獻的資料(例如： <a href="#">Purdue Online Writing Lab</a> )來幫助自己寫參考文獻 (例如：APA, MLA, Chicago styles)。				
19.	寫學術文章/ 論文研究提案/ 資格考試/ 論文時，我會使用參考文獻軟體/ 網站 (例如： <a href="#">Citation Machine</a> , <a href="#">EndNote</a> , <a href="#">RefWorks</a> 或 <a href="#">Zotero</a> )來產生文中夾註( <a href="#">in-text citations</a> )和文末的參考文獻 ( <a href="#">bibliography</a> )。				
20.	寫學術文章/ 論文研究提案/ 資格考試/ 論文時，我會上網或使用電子資料來查英文字、詞、用語或文法。				

<p>9-1 您曾經使用何種網路/電子資料來幫助自己寫學術文章/ 論文研究提案/ 資格考試/ 論文? (可複選)</p> <p><input type="checkbox"/> 線上英文字典或軟體 (例如：<a href="#">Visuwords</a>、<a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 線上英文語料庫 (例如：<a href="#">COCA</a> or <a href="#">Netspeak</a>)</p> <p><input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 線上有關英文文法的資料 <input type="checkbox"/> 其它</p>					
<p>9-2 您常常使用何種網路/電子資料來幫助自己寫學術文章/ 論文研究提案/ 資格考試/ 論文? (可複選)</p> <p><input type="checkbox"/> 線上英文字典或軟體 (例如：<a href="#">Visuwords</a>、<a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 線上英文語料庫 (例如：<a href="#">COCA</a> or <a href="#">Netspeak</a>)</p> <p><input type="checkbox"/> 線上專業字典 (例如：醫學、法律、工學、生物專業字典) <input type="checkbox"/> 線上有關英文文法的資料 <input type="checkbox"/> 其它</p>					
21.	寫學術文章/ 論文研究提案/ 資格考試/ 論文時，我會先用母語/ 中文寫下自己的想法和文章內容，再用翻譯軟體翻譯成英文。				
22.	寫學術文章/ 論文研究提案/ 資格考試/ 論文時，我會使用學術抄襲檢測軟體 (例如： <a href="#">Plag Tracker</a> )來確保自己所寫的部分沒有抄襲其他學者的文章。				
23.	寫學術文章/ 論文研究提案/ 資格考試/ 論文時，我會使用軟體畫示意圖或流程圖(例如： <a href="#">Gliffy</a> 、 <a href="#">Lucidchart</a> 、 <a href="#">draw.io</a> )來幫助自己寫文章大綱。				
24.	寫學術文章/ 論文研究提案/ 資格考試/ 論文時，我會依賴 Microsoft Word 中的拼寫和文法檢查功能來幫助自己改正寫作中的錯誤。				
25.	您還有透過其他網路/科技產品/軟體來幫助自己學習研究和學術上的知識嗎? 若有，請敘述於下方。				

\*\*感謝您百忙之中填寫此問卷，若您參與進一步的資料搜集過程 (訪談、觀察、文件收集、日誌)，於資料搜集的結尾我們將提供\$20 或更超值精美禮品作為感謝!! 若您有興趣繼續參與此研究，請留下您的聯絡資訊。

姓名：\_\_\_\_\_

E-mail: \_\_\_\_\_

電話(option)：\_\_\_\_\_

## Survey for Students in the Post-candidacy-exam Stage -- Simplified Chinese Version

### 第一部份 个人背景资料

姓名: \_\_\_\_\_

性别:  女  男

年龄:  20 - 25  26 - 30  31 - 35  36 - 40  40 +

您的国籍? \_\_\_\_\_

您来美国多久了?  0 - 1年  1+年至2年  2+年至3年  3+年至4年  4+年至5年  
 5+年至6年  6年以上

您的 TOEFL 分数 (请填入您最近一次的 TOEFL CBT 或 TOEFL iBT 成绩):

TOEFL CBT (满分 300): \_\_\_\_\_ 或

TOEFL iBT (满分 120): \_\_\_\_\_

您目前攻读硕士或博士学位?  硕士  博士

您目前念的学校与系所(graduate program)? \_\_\_\_\_

您于此 program 多久?

1+ 至 6 个月  6+个月至 1 年  1+年至 1 年半  1+年半至 2 年  2+年至 3 年  3+年至 4 年  4+年至 5 年  
 5+年至 6 年  6 年以上

请选择您在以下用途中，使用网络/科技产品/软件的感受...(请考虑您常使用的科技产品、网络、网站的使用，例如：e-mail、手机、平板/iPad、计算机、网络社群、博客、Twitter、Facebook、QQ、WeChat、Skype...等)

	很不适应	比较不适应	比较适应	很适应	不适用/不清楚
与学校同学沟通					
与学校教授沟通					
与校外学者/学生沟通					

一般的英语阅读 (例如: 读新闻和非专业书籍)					
一般的英语写作 (例如: 在博客、Twitter、facebook、发帖或跟贴等)					
一般的英语听力 (例如: 看电视剧、新闻、影片或音乐)					
一般的英语交流 (例如: 与朋友通过手机聊天、在 skype、QQ、facebook、WeChat 等上交流)					
学术上的英语阅读 (例如: 在网络上阅读与自己学术领域相关的英文文章、贴子或邮件)					
学术上的英语写作 (例如: 用计算机撰写英语学术文章/作业, 或在网络上用英语写相关的学术评论)					
学术上的英语听力 (例如: 在网络上与与自己学术领域相关的英语影片、演讲...等)					
学术上的英语交流 (例如: 在社交网络上与其他人用英语谈论与自己学术领域相关的话题)					

## 第二部份 使用网络/科技产品/软件从事与学术相关的活动

**学术社群(Academic Communities)** (请考虑您常使用的科技产品、网络、网站的使用, 例如: e-mail、手机、平板/iPad、计算机、网络社群、博客、Twitter、Facebook、QQ、WeChat/微信、Skype...等)

	总是 100%	时常 75%	有时 50%	很少 25%	从不 0%
36. 我在网络上写有关于自己的研究或阅读过的学术文章之意见/看法 (例如: 在个人的博客、bbs、Wikispaces、facebook 或 Twitter 上做评论)。					
37. 当我在写学术文章/论文研究提案/资格考试/论文遇到困难时, 我会上网询问同学或其他校外学者/学生的看法/建议。					
38. 我上网阅读文章、贴子或资料来了解如何发表学术文章。					
39. 我使用网络/科技产品/软件 (例如: e-mail 或 Facebook) 和学校教授讨论有关学术、课堂或作业的事情。					

4-1 若回答总是、时常、有时候、或是很少，您使用什麼网络/科技产品/软件和学校教授讨论有关学术、课堂或作业的事情？ <input type="checkbox"/> e-mail <input type="checkbox"/> 手机短讯 <input type="checkbox"/> 手机通话 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat/微信, or Skype) <input type="checkbox"/> 社交网络 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它(请列出) _____					
40. 我使用网络/科技产品/软件 (例如：e-mail 或 Facebook) 和学校同学讨论有关学术、课堂或作业的事情。					
5-1 若回答总是、时常、有时候、或是很少，您使用什麼网络/科技产品/软件和学校同学讨论有关学术、课堂或作业的事情？ <input type="checkbox"/> e-mail <input type="checkbox"/> 手机短讯 <input type="checkbox"/> 手机通话 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat/微信, or Skype) <input type="checkbox"/> 社交网络 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它 (请列出) _____					
41. 我使用网络/科技产品/软件(例如 Facebook、在线讨论区、Twitter) 和校外学者/学生讨论有关学术、课堂或作业的事情。					
6-1 若回答总是、时常、有时候、或是很少，您使用什麼网络/科技产品/软件和校外学者/学生讨论有关学术、课堂或作业的事情？ <input type="checkbox"/> e-mail <input type="checkbox"/> 手机短讯 <input type="checkbox"/> 手机通话 <input type="checkbox"/> 即時通訊 App (例如：Line, QQ, WeChat/微信, or Skype) <input type="checkbox"/> 社交网络 (例如：facebook, blogs, online forums, Wikispaces, or Twitter) <input type="checkbox"/> 其它 (请列出) _____					
	同意	不同意			
42. 我觉得通过网络/科技产品/软件比面对面的方式，更能清楚的用英语表达自己的想法或意见。					
43. 我觉得通过网络/科技产品/软件谈论学术、课堂或作业的事情，比面对面的方式学的更多。					
44. 我参与在线讨论的次数多于面对面的讨论。					
	总是 100%	时常 75%	有时 50%	很少 25%	从不 0%
45. 我使用网络/科技产品/软件来准备学术会议(conferences)或研讨会					

(workshops)的口头和上台 presentation 。					
46. 参与学术会议(conferences)或学术活动时, 我会使用相机、平板或手机来记录学/演讲者的 ppt 来帮助自己瞭解其演讲内容。					
47. 参与学术讨论时(例如: 在课堂、学术会议/conferences、研究学院里) 我会使用手提电脑、平板或手机来上网查教授、同学、参与者提到的单字、词汇或知识。					
48. 参与学术讨论时(例如: 在课堂、学术会议/conferences、研究学院里) 我会使用手提电脑、平板或手机来做笔记。					
49. 我会在演讲中做录音或录像来帮助自己瞭解其内容。					
50. 您还有通过其它网络/科技产品/软件来帮助自己参与学术社群(academic communities)吗?若有, 请叙述于下方?					

### 课程/学术上的学习

	总是 100%	时常 75%	有时 50%	很少 25%	从不 0%
12. 我上网看与自己学术领域、研究、专业相关的影片(例如: <a href="#">TEDTalks</a> )。					
13. 我使用搜索引擎来搜索学术文章。					
2-1 您曾经使用何种搜寻引擎来寻找学术文章?(可复选) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">学校图书馆的搜寻引擎</a> <input type="checkbox"/> <a href="#">学校图书馆的数据库</a> <input type="checkbox"/> 其它 (请列出常用的搜寻引擎) _____					
2-2 您常常使用何种搜寻引擎来寻找学术文章?(可复选) <input type="checkbox"/> <a href="#">Google Scholar</a> <input type="checkbox"/> <a href="#">学校图书馆的搜寻引擎</a> <input type="checkbox"/> <a href="#">学校图书馆的数据库</a> <input type="checkbox"/> 其它 (请列出常用的搜寻引擎) _____					
14. 阅读学术文章遇到不熟悉字、词、专业词语或概念时, 我会上网查更多的解释来帮助自己了解文章内容。					



<p>3-1 阅读学术文章遇到不熟悉的字、词、专业词语或概念时, 您<b>曾经</b>使用何种网络/电子数据来帮助自己瞭解文章内容? (可复选)</p> <p><input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典)</p> <p><input type="checkbox"/> 学术网站 <input type="checkbox"/> 非学术网站(例如: 百度、谷歌、维基百科) <input type="checkbox"/> 其它(请列出) _____</p>					
<p>3-2 阅读学术文章遇到不熟悉的字、词、专业词语或概念时, 您<b>常常</b>使用何种网络/电子数据来帮助自己了解文章内容? (可复选)</p> <p><input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典)</p> <p><input type="checkbox"/> 学术网站 <input type="checkbox"/> 非学术网站(例如: 百度、谷歌、维基百科) <input type="checkbox"/> 其它(请列出) _____</p>					
<p>15. 阅读学术文章时, 我会使用网络/ 软件等 (例如: 翻译软件、PDF 画重点功能) 来帮助自己了解文章内容。</p>					
<p>4-1 您<b>曾经</b>使用什么网络/ 软件来帮助自己了解文章内容? (可复选)</p> <p><input type="checkbox"/> 翻译软件 (例如: <a href="#">Google Translate</a>、Dr. Eye 的实时翻译或全文翻译的功能)</p> <p><input type="checkbox"/> 示意图和/或流程图软件 (例如: 使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意图/流程图软件画心智图, 来帮助自己了解文章重点)</p> <p><input type="checkbox"/> Read Aloud/Speech 软件或网站 (例如: <a href="#">Natural Reader</a>) 批注: Read Aloud/Speech 软件为一种朗读软件, 可读出文章内容。</p> <p><input type="checkbox"/> PDF 阅读软件的某些功能 (例如: 使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 画重点和做笔记)</p> <p><input type="checkbox"/> 其它(请列出) _____</p>					
<p>4-2 您<b>常常</b>使用什么网络/ 软件来帮助自己了解文章内容? (可复选)</p> <p><input type="checkbox"/> 翻译软件 (例如: <a href="#">Google Translate</a>、Dr. Eye 的实时翻译或全文翻译的功能)</p> <p><input type="checkbox"/> 示意图和/或流程图软件 (例如: 使用 <a href="#">Gliffy</a>、<a href="#">Lucidchart</a>、<a href="#">draw.io</a> 等示意图/流程图软件画心智图, 来帮助自己了解文章重点)</p> <p><input type="checkbox"/> Read Aloud/Speech 软件或网站 (例如: <a href="#">Natural Reader</a>) 批注: Read Aloud/Speech 软件为一种朗读软件, 可读出文章内容。</p> <p><input type="checkbox"/> PDF 阅读软件的某些功能 (例如: 使用 Adobe PDF or <a href="#">PDF XChanges Viewer</a> 画重点和做笔记)</p> <p><input type="checkbox"/> 其它(请列出) _____</p>					
<p>16. 阅读学术文章时, 我会使用网络空间 (例如: 个人的博客、网站、</p>					

Wikispaces, Google Doc)来做笔记。					
17. 我使用参考文献 / 参考书目软件 (例如: <a href="#">EndNote</a> , <a href="#">RefWorks</a> , or <a href="#">Zotero</a> )来帮助自己整理读过的学术文章。					
18. 写学术文章/ 论文研究提案/ 资格考试/ 论文时, 我会上网查有关参考文献格式的信息(例如: <a href="#">Purdue Online Writing Lab</a> )来帮助自己写参考文献格式 (例如: APA, MLA, Chicago styles).					
19. 写学术文章/ 论文研究提案/ 资格考试/ 论文时, 我会使用参考文献软件/网站 (例如: <a href="#">EndNote</a> , <a href="#">RefWorks</a> 或 <a href="#">Zotero</a> )来产生文中引用( <a href="#">in-text citations</a> )和文末的参考文献( <a href="#">bibliography</a> )。					
20. 写学术文章/ 论文研究提案/ 资格考试/ 论文时, 我会上网或使用电子数据查英文字、词、用语和文法。					
<p>9-1 您曾经使用何种网络/电子数据来帮助自己写学术文章/作业? (可复选)</p> <p><input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Visuwords</a>、<a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 在线英文语料库 (例如: <a href="#">COCA</a> or <a href="#">Netspeak</a>)</p> <p><input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典) <input type="checkbox"/> 在线有关英语文法的资料 <input type="checkbox"/> 其它(请列出)</p>					
<p>9-2 您常常使用何种网络/电子数据来帮助自己写学术文章/作业? (可复选)</p> <p><input type="checkbox"/> 在线英文字典或软件 (例如: <a href="#">Visuwords</a>、<a href="#">Dr. Eye</a>、<a href="#">Diction.com</a>、<a href="#">Merriam-Webster</a>) <input type="checkbox"/> 在线英文语料库 (例如: <a href="#">COCA</a> or <a href="#">Netspeak</a>)</p> <p><input type="checkbox"/> 在线专业字典 (例如: 医学、法律、工学、生物专业字典) <input type="checkbox"/> 在线有关英语文法的资料 <input type="checkbox"/> 其它(请列出)</p>					
21. 写学术文章/ 论文研究提案/ 资格考试/ 论文时, 我会先用母语/中文写下自己的想法和文章内容, 再用翻译软件翻译成英语。					
22. 写学术文章/ 论文研究提案/ 资格考试/ 论文时, 我会使用学术抄袭检测软件 (例如: <a href="#">Plag Tracker</a> ) 来确保自己所写的部分没有抄袭其它学者的文章。					
23. 写学术文章/ 论文研究提案/ 资格考试/ 论文时, 我会使用软件画示意图或流程图 (例如: <a href="#">Gliffy</a> 、 <a href="#">Lucidchart</a> 、 <a href="#">draw.io</a> )来帮助自己写文章提纲。					
24. 写学术文章/ 论文研究提案/ 资格考试/ 论文时, 我会依赖 Microsoft Word 中的拼写和文法检查功能来帮助自己改正写作中的错误。					

25. 您还有透过其它网络/科技产品/软件来帮助自己学习研究和学术有关的知识吗?若有, 请叙述于下方?

\*\*感谢您在百忙之中填写我们的问卷, 若您参加进一步的资料搜集过程 (访谈、观察、文件收集、日志), 于资料搜集的结尾我们将提供\$20 或更超值精美礼品作为感谢!! 若您有兴趣继续参与此研究, 请留下您的联系方式。

姓名: \_\_\_\_\_

E-mail: \_\_\_\_\_

电话(option): \_\_\_\_\_

### Supplement 3-5 The 1st Interview Questions

Participant:

Date/Time:

#### *1<sup>st</sup> section -- Background information*

1. How long have you been in the United States?
2. Which master/doctoral program are you in? How long have you been in the program?

#### Habit of using technology

3. Could describe your use of technology for non-academic purposes?
4. Could you describe your use of technology for academic purposes?
5. What technology tools/websites/software do you often use?
  - How often do you use them?
  - What do you use them for?
6. Could you describe how you have used technology to do **general** reading, writing, listening, and speaking in **your native language**?
7. Could you describe how you have used technology to do **general** reading, writing, listening, and speaking in **English**?
8. Could you describe how you have used technology to do **academic** reading, writing, listening, and speaking in **your native language**?
9. Could you describe how you have used technology to do **academic** reading, writing, listening, and speaking in **English**?

#### *2<sup>nd</sup> section -- Story of learning L1 academic knowledge*

1. Could you describe how you learned L1 academic knowledge in your native country before?
  - teachers' teaching methods (whether your teachers used or did not use technology)
  - your learning habit and strategies in and outside of class (whether you used or did not use technology)
  - ways of interacting with your teachers and peers in and outside of class (whether you used or did not use technology)
  - ways of evaluating learned knowledge (e.g. paper-based tests)
2. Could you describe what your academic program's and professors' expectations of your academic and professional development when studying a college and/or a master program?

## Technology Use for Academic Purposes

### Attended Classes [in L1 academic culture]

3. Could you describe how you prepared for a class before attending it?
  - a. Did you use technology tools/ websites/ software during the process? If yes, what technology tools/ websites/ software you used and how you used them during the process
  - b. What challenges did you encounter during the process? How did you overcome the challenges?
4. Could you describe how you attended a class? (a, b questions as in Q3)
5. Did your academic program and professors value classroom discussions? If yes, how did you participate in class discussions? (a, b questions as in Q3)
6. How did you prepare an oral presentation? (a, b questions as in Q3)
7. How did you give an oral presentation? (a, b questions as in Q3)

### Outside of Class [in L1 academic culture]

8. How did you review learned knowledge from a class? (a, b questions as in Q3)
9. How did you write a paper or an assignment? (a, b questions as in Q3)
10. Had you written an academic paper for a publication and/or written a thesis when studying in China / Taiwan? If yes, ..... a, b questions as in Q3.
11. How did you communicate with your professors, peers and another scholar/ students outside of the school? (a, b questions as in Q3)
12. Did you participate in an (online and/or face-to-face) academic community outside of class? If yes, ... a, b questions as in Q3.
13. Did you use technology tools/ websites/ software to help you improve academic knowledge and skills outside of class? (a, b questions as in Q3)

**Supplement 3-6 Bi-weekly Interview Questions**

Participant:

Date/Time:

**Weekly Interview Questions [Collect participants' weekly checklist and daily report forms]**

1. Could you describe how you used technology tools/ websites/ software to do academic activities/ tasks this week?
  - Used technology tools/ websites/ software in class
  - Used technology tools/ websites/ software outside of class
  - Chatted with peers, professors, and scholars/students outside of the school online
  
2. Could you tell me more about what you did ..... in your journal ?

### Supplement 3-7 Last Interview Questions

Participant:

Date/Time:

#### *Story of Technology Use for Academic Purposes in the US Academic Context*

1. Could you describe to what extent you think you successfully adjust to doctoral life and to your academic discipline? (e.g. I could participate in academic discussions, cite important scholars' works, and be able to write an academic paper without encountering many challenges.)
2. What are your *department's and professors' expectations* for...
  - preparing for a class
  - attending a class / participate in class discussions
  - writing a paper
  - giving an oral presentation
  - communicating with professors, peers, and another scholar/ student outside of the class
  - participating in academic communities
  - developing academic and research knowledge and ability
3. How do you usually *prepare for a class* before attending it (e.g. read online articles or webpages related to the class)?
  - a. Do you use technology tools/ websites/ software during the process? If yes, please describe why you use technology tools/ websites/ software during the process, what technology tools/ websites/ software you use, and how you use them during the process?
  - b. What challenges do you have when using technology to prepare for a class? How do you overcome the challenges?
4. How do you *usually attend a class*? (a and b questions as in Q3)
5. How do you *participate in class discussions*? (a and b questions as in Q3)
6. Have you *attended online class discussions*?  
If yes,....
  - a. Could you describe your experience of it? What were your instructor's / professor's expectations and/or requirements of attending online class discussions? What technology tools/ software did you use and how did you use them during the process?
  - b. What challenges did you have when participating in online discussions? How did you overcome the challenges?
7. How do you *review learned knowledge* for a class? (a and b questions as in Q3)
8. How do you *write a paper and/or an assignment*? (a and b questions as in Q3)
9. How do you usually *prepare an oral presentation*? (a and b questions as in Q3)
10. How do you usually *give an oral presentation*? (a and b questions as in Q3)
11. How do you usually *communicate with your professors, peers, and another scholar/*

students outside of the school?

- a and b questions as in Q3

- c. Could you reflect how you communicated with your professors, peers, and another scholar/ student outside of the school in your native academic culture and in the American academic culture? What are similarities and differences?
12. Do you participate in (online and/or face-to-face) academic communities outside of class?  
- If yes, please describe how you usually participate in the academic community? (a and b questions as in Q3)  
  
c. Could you reflect how you participated in an academic community in your native academic culture and in American academic culture? What are similarities and differences?
13. How do you usually enhance your academic and research knowledge and ability outside of class? [e.g. attend face-to-face and/or online academic communities]  
- a and b questions as in Q3
14. Do you maintain and/or continue developing L1 academic and research knowledge?  
If yes, please describe how you maintain and/or continue developing L1 academic and research knowledge?  
- a and b questions as in Q3
15. Could you describe the process of how you attend academic conferences? (a and b questions as in Q3)
16. Could you describe the process of how you attend academic meetings in your department? (a and b questions as in Q3)
17. What other situations do you use technology tools/ websites/ software to do academic related activities?  
- Please describe why you use technology tools/ websites/ software during the process, what technology tools/ websites/ software you use, and how you use them during the process?  
- What challenges do you have when using technology to prepare for a class? How do you overcome the challenges?
18. Could you describe your overall feelings of adjusting to the American graduate school culture and your disciplinary academic culture?
  - a. What are American and your particular disciplinary academic rules and practices that you accept and feel you adjust well?
  - b. What are American academic and your particular disciplinary rules and practices that you feel hard to adjust to?
  - c. What is the role of technology during the process of adjusting to your academic culture? (whether technology helps you adjust to American academic culture and your disciplinary academic culture)



### Supplement 3-8 14-week Weekly Journal

English Version

**Name:** \_\_\_\_\_

**Dates: From** \_\_\_\_\_ **to** \_\_\_\_\_

Thank you for your willingness to participate in the survey and the follow-up process. The purpose of the semester-long journal is to collect information about how you use technology to help you do academic tasks and participate in your disciplinary communities. Participating in disciplinary communities means to attend formal or informal scholarly discussions in class, meetings, conferences, events, or any occasions face-to-face or online. Please record your technology use for academic purposes weekly through the following **Weekly Report Form**. A short interview will be given bi-weekly to help me understand details of your Weekly Report Forms. Thanks again for your participation and time.

#### **Weekly Report Form:**

Please consider different forms of technology (your cell phone, tablet/iPad, desktop, laptop, camera, recorder...etc.) that you used to do academic tasks this week. For examples:

**Reading:** 1) PDF software's highlighting and note-taking functions, 2) Online English dictionaries/software (e.g. [Visuwords](#), [Dr. Eye](#), [Diction.com](#), or [Merriam-Webster](#)), 3) Online professional dictionaries/ software (e.g. medical, legal, engineering, or biological dictionaries), 4) Translation websites/ software (e.g. [Google Translate](#), Dr. Eye's instant translation or whole-text translation functions), 5) Diagram/ flowchart websites/ software (e.g. use [Gliffy](#), [Lucidchart](#), or [draw.io](#) similar websites/software to draw mind maps to help you understand big ideas of the texts), 6) Read Aloud/Speech websites/ software (e.g. [Natural Reader](#) ; Note: Read Aloud/Speech software can read out load a text for a reader)...etc.

**Writing:** 1) Online English dictionaries/software, 2) Online professional dictionaries/ software, 3) Translation websites/ software, 4) Diagram/ flowchart websites/ software (e.g. use diagram/ flowchart software to help myself write outline of an academic paper), 5) Online English corpus (e.g. [COCA](#) or [Netspeak](#)), 6) Online citation resources (e.g. [Purdue Online Writing Lab](#)), 7) Citation machines/websites/software (e.g. [Citation Machine](#), [EndNote](#), [RefWorks](#), or [Zotero](#)), 8) Plagiarism detector software/websites (e.g. [Plag Tracker](#)), 9) Spell and grammar checker (e.g. Microsoft Word spell checker)... etc.

**Communication:** 1) E-mail, Cell phone texts, 2) Cell phone calls, 3) Communicative Apps (e.g. Line, QQ, WeChat, or Skype), 4) Social media sites (e.g. facebook, blogs, online forums, Wikispaces, or Twitter)...etc.

**Others** (e.g. use technology to learn academic knowledge or do research): Online video clips (e.g. [TEDTalks](#)), online search engines, the school library’s search engine, the school library’s research databases, data collection tools (e.g. Skype, Dragon App, Survey Monkey), data analysis tools (e.g. Qualitative tools: SPSS, SARS; Qualitative tools: [ExpressScribe](#), [Audiotranskription](#))...etc.

<b>Date</b>	<b>What technology tools/websites/software did I use?</b>	<b>What did I do?</b>	<b>How often did you use the tools? (1-2 times, 3-4 times, 5-6 times, everyday, cannot remember)</b>	<b>Note (e.g. challenges, benefits...)</b>
5/16	e.g. <b>Tool 1:</b> facebook – Qualitative Research Group <b>Tool 2:</b> Google search engine <b>Tool 3:</b> my cell phone - WeChat <b>Tool 4:</b> my ipad <b>Tool 5:</b> Citation website – Zotero	e.g. <b>Tool 1:</b> learned knowledge about qualitative research and ask scholars how to decide which data collection tools I should choose for my study <b>Tool 2:</b> found online resources/articles about how to write a methodology chapter for my proposal <b>Tool 3:</b> asked my peers about our course project <b>Tool 4:</b> took a note, captured slides, searched words & terms in class and department’s meetings <b>Tool 5:</b> manage academic articles that I read and generated in-text citations and references for my papers	e.g. <b>Tool 1:</b> 1-2 times <b>Tool 2:</b> cannot remember <b>Tool 3:</b> 1-2 times <b>Tool 4:</b> 3-4 times <b>Tool 5:</b> everyday	- I read a great article about qualitative research suggested by a scholar on the Qualitative Research Group (facebook). - There are several ways to write a methodology chapter. I’m not sure which one is the right and appropriate one that my advisor expects.


### 14-week Weekly Journal -- Traditional Chinese Version

一學期/14 週長的週誌

姓名: \_\_\_\_\_

日期: 從 \_\_\_\_\_ 至 \_\_\_\_\_

感謝您參與問卷調查和後續的資料收集過程! 此一週誌，其主要目的是收集您每週如何運用網路/科技產品/軟體，來幫助自己從事學術上的學習，以及參與學術社群 (academic communities)。在此，參與學術社群意指在課堂、會議(meeting)、學術會議(conference)、任何活動或場合中，參與正式或非正式，線上或非線上之相關的學術討論。請使用下面的週誌記錄表，來記錄您這一禮拜使用網路/科技產品/軟體，從事學術上的學習、活動、和參與學術社群的狀況。

#### 週誌記錄表

請考慮您這一週使用不同的科技設備(例如：您的手機、平板/iPad、桌機、收提電腦、相機、錄音器材...等)來從事學術上的學習、活動、和參與學術社群。例如：

**閱讀：**1) PDF 軟體的畫重點和筆記功能、2) 線上英文字典/軟體 (例如：[Visuwords](#), [Dr. Eye](#), [Diction.com](#), or [Merriam-Webster](#))、3) 線上專業字典/軟體 (例如：醫學、法律、工學、生物專業字典)、4) 翻譯網站/軟體 (例如：[Google Translate](#)、[Dr. Eye](#) 的即時翻譯或全文翻譯的功能)、5) 示意圖/流程圖網站/軟體 (例如：使用 [Gliffy](#)、[Lucidchart](#)、[draw.io](#) 等示意圖/流程圖網站/軟體畫心智圖，來幫助自己了解文章重點)、6) Read Aloud/Speech 軟體或網站 (例如：[Natural Reader](#)；註解：Read Aloud/Speech 軟體為一種朗讀軟體，可讀出文章內容。)...等。

**寫作：**1) 線上英文字典/軟體、2) 線上專業字典/軟體、3) 翻譯網站/軟體、4) 示意圖/流程圖網站/軟體 (例如：使用軟體幫助自己寫作業/學術文章的大綱)、5) 線上英文語料庫 (例如：[COCA](#) 或 [Netspeak](#))、6) 線上參考文獻的資料 (例如：[Purdue Online Writing Lab](#))、7) 參考文獻軟體/網站 (例如：[Citation Machine](#), [EndNote](#), [RefWorks](#) 或 [Zotero](#))、8) 學術抄襲檢測軟體 (例如：[Plag Tracker](#))、9) 線上拼寫和文法檢查功能 (例如：Microsoft Word 中的拼寫和文法檢查功能)...等

**溝通：**1) E-mail、手機簡訊、2) 手機電話通訊、3) 即時通訊 App (例如：Line, QQ, WeChat, or Skype)、4) 網路社群 (例如：facebook, blogs, online forums, Wikispaces, or Twitter)...等

**其他**(例如：用於學習學術知識、研究)：線上影片(e.g. [TEDTalks](#))、線上搜索引擎、[OSU 學校圖書館的搜尋引擎](#)、[OSU 學校圖書館的資料庫](#)、研究資料搜集工具 (例如：Skype, Dragon App, Survey Monkey)、研究資料分析工具 (例如：量化工具：SPSS, SARS；質化工具：[ExpressScribe](#), [Audiotranskription](#))...等

日期	我使用什麼網路/科技產品/軟體?	我使用網路/科技產品/軟體做什麼事?	使用次數 (1~2 次; 3~4 次; 5~6 次; 每天)	註記: (遇到什麼困難、對我有什麼幫助)
5/16	例如： <b>工具 1:</b> 在 facebook 上的質化研究社團 <b>工具 2:</b> 在 Google search engine <b>工具 3:</b> 我的手機 <b>工具 4:</b> 我的 ipad <b>工具 5:</b> 整理文獻的網站 - Zotero	例如： <b>工具 1:</b> 學習有關質化研究的知識，以及問其他的學者，如何決定我的研究應該使用哪些資料收集工具 <b>工具 2:</b> 線上找資料和找有關如何寫研究方法的學術文章 <b>工具 3:</b> 用手機簡訊問我同學課堂作業/企劃 <b>工具 4:</b> 作筆記、照演講者的 ppt/投影片、在課堂上搜尋單字和專有名詞 <b>工具 5:</b> 用 Zotero 整理唸過的學術文章，以及產生文中夾註( <a href="#">in-text citations</a> )和文末的參考文獻	例如： <b>工具 1:</b> 1~2 次 <b>工具 2:</b> 3~4 次 <b>工具 3:</b> 1~2 次 <b>工具 4:</b> 3~4 次 <b>工具 5:</b> 每天	- 我在 facebook 質化研究社團上，閱讀到一篇很好的文章，其文章是某學者推薦的閱讀文章，是有關於質化研究的文章。 - 在 facebook 質化研究社團裡，學者提到很多模式來寫研究方法的章節。我不知道哪一個模式是正確的，是符合我教授的期望。


## 14-week Weekly Journal -- Simplified Chinese Version 一学期/十四周 周志

姓名: \_\_\_\_\_

日期: 从 \_\_\_\_\_ 到 \_\_\_\_\_

感谢您参与问卷调查和后续的资料收集过程! 此一周志, 其主要目的是收集您每周如何运用网络/科技产品/软件, 来帮助自己从事学术相关的学习, 以及参与学术社群 (academic communities)。在此, 参与学术社群意指在课堂、会议 (meeting)、学术会议 (conference)、任何活动或场合中, 参与正式或非正式, 在线或非在线之相关的学术讨论。请使用下面的周志记录表, 来记录您这一礼拜使用网络/科技产品/软件, 从事学术上的学习、活动、和参与学术社群的状况。

### 周志记录表

请考虑您这一周使用**不同的科技设备**(例如: 您的手机、平板/iPad、台式机、笔记型电脑、相机、录音器材...等)来从事学术相关的学习、活动、和参与学术社群。例如:

**阅读:** 1) PDF 软件的画重点和笔记功能、2) 在线英文字典/软件 (例如: [Visuwords](#), [Dr. Eye](#), [Diction.com](#), or [Merriam-Webster](#))、3) 在线专业字典/软件 (例如: 医学、法律、工学、生物专业字典)、4) 翻译网站/软件 (例如: [Google Translate](#)、[Dr. Eye](#) 的实时翻译或全文翻译的功能)、5) 示意图/流程图网站/软件 (例如: 使用 [Gliffy](#)、[Lucidchart](#)、[draw.io](#) 等示意图/流程图网站/软件画心智图, 来帮助自己了解文章重点)、6) Read Aloud/Speech 软件或网站 (例如: [Natural Reader](#); 批注: Read Aloud/Speech 软件为一种朗读软件, 可读出文章内容。)...等。

**写作:** 1) 在线英文字典/软件、2) 在线专业字典/软件、3) 翻译网站/软件、4) 示意图/流程图网站/软件 (例如: 使用软件帮助自己写作业/学术文章的大纲)、5) 在线英文语料库 (例如: [COCA](#) 或 [Netspeak](#))、6) 在线参考文献的数据 (例如: [Purdue Online Writing Lab](#))、7) 参考文献软件/网站 (例如: [Citation Machine](#), [EndNote](#), [RefWorks](#) 或 [Zotero](#))、8) 学术抄袭检测软件 (例如: [Plag Tracker](#))、9) 在线拼写和文法检查功能 (例如: Microsoft Word 中的拼写和文法检查功能)...等

**沟通:** 1) E-mail、手机简讯、2) 手机电话通讯、3) 即时通讯 App (例如: Line, QQ, WeChat/微信, or Skype)、4) 网络社群 (例如: facebook, blogs, online forums, Wikispaces, or Twitter)...等

**其它**(例如: 用于学习学术知识、研究): 在线影片 (e.g. [TEDTalks](#))、在线搜索引擎、[OSU 学校图书馆的搜寻引擎](#)、[OSU 学校图书馆的数据库](#)、研究资料搜集工具 (例如: Skype, Dragon App, Survey Monkey)、研究资料分析工具 (例如: 量化工具: SPSS, SARS; 质化工具: [ExpressScribe](#), [Audiotranskription](#))...等

日期	我使用什么网络/科技产品/软件?	我使用网络/科技产品/软件做什么事?	使用次数 (1~2 次; 3~4 次; 5~6 次; 每天)	注记: (遇到什么困难、对我有什么帮助)
5/16	例如: 工具 1: 在 facebook 上的质化研究社团 工具 2: 在 Google search engine 工具 3: 我的手机 工具 4: 我的平板 工具 5: 整理文献的网站 - Zotero	例如: 工具 1: 学习有关质化研究的知识, 以及问其倦学者/学生, 如何决定我的研究应该使用哪些数据收集工具 工具 2: 在网络上搜索有关如何写研究方法章节的资料 工具 3: 用手机短讯问我同学课堂作业/企划 工具 4: 做笔记、照演讲者的 ppt、在课堂上查单字和专有名词 工具 5: 用 Zotero 整理念过的学术文章, 以及产生文中夹注( <a href="#">in-text citations</a> )和文末的参考文献	例如: 工具 1: 1~2 次 工具 2: 3~4 次 工具 3: 1~2 次 工具 4: 3~4 次 工具 5: 每天	- 我在 facebook 质化研究社团上, 阅读到一篇很好的文章, 其文章是某学者推荐的阅读文章, 是有关于质化研究的文章。 - 在 facebook 质化研究社团里, 学者提到很多模式来写研究方法的章节, 但我不知道哪一个模式是适合的且符合教授的期望。




**Supplement 3-9 Pictures of 烏賊車 (wu zei che; a squid car or scooter)**



Citation:

Kuo, C. N. (Photographer). (2009, July 29). *A squid car* [Digital image]. Retrieved from <http://cnkuo.pixnet.net/blog/post/48186296-%E7%83%8F%E8%B3%8A%E8%BB%8A>



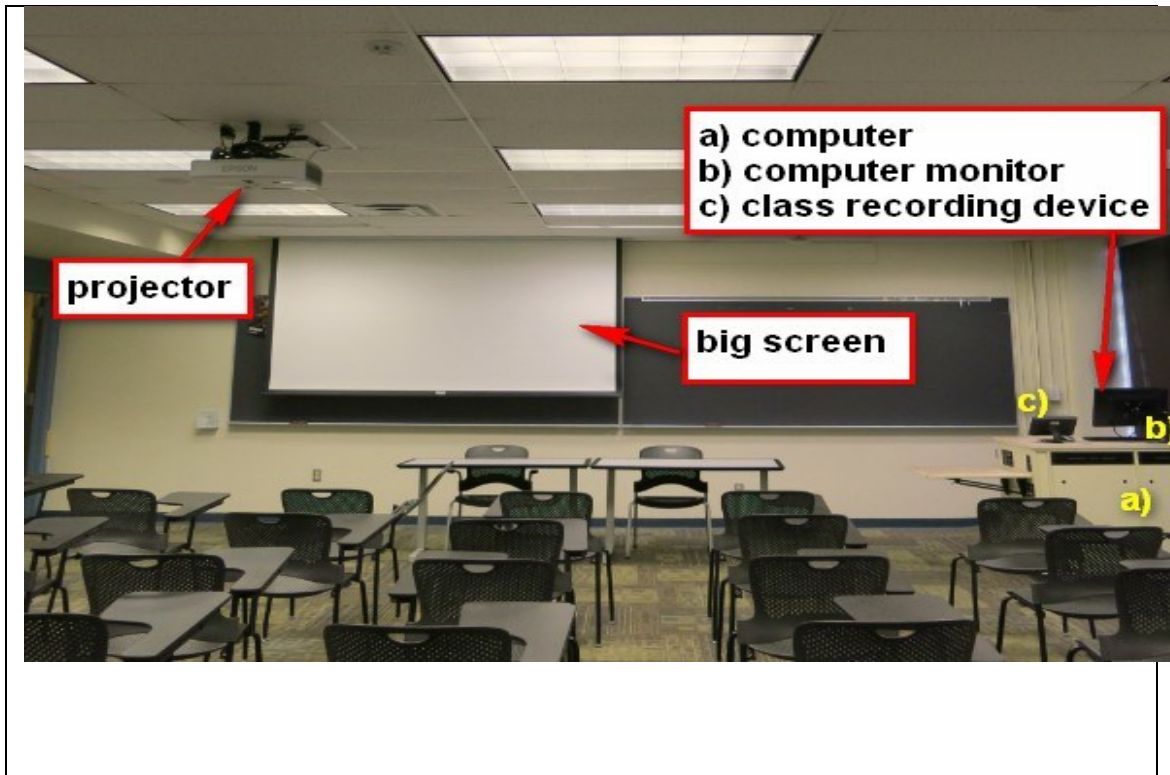
Citation:

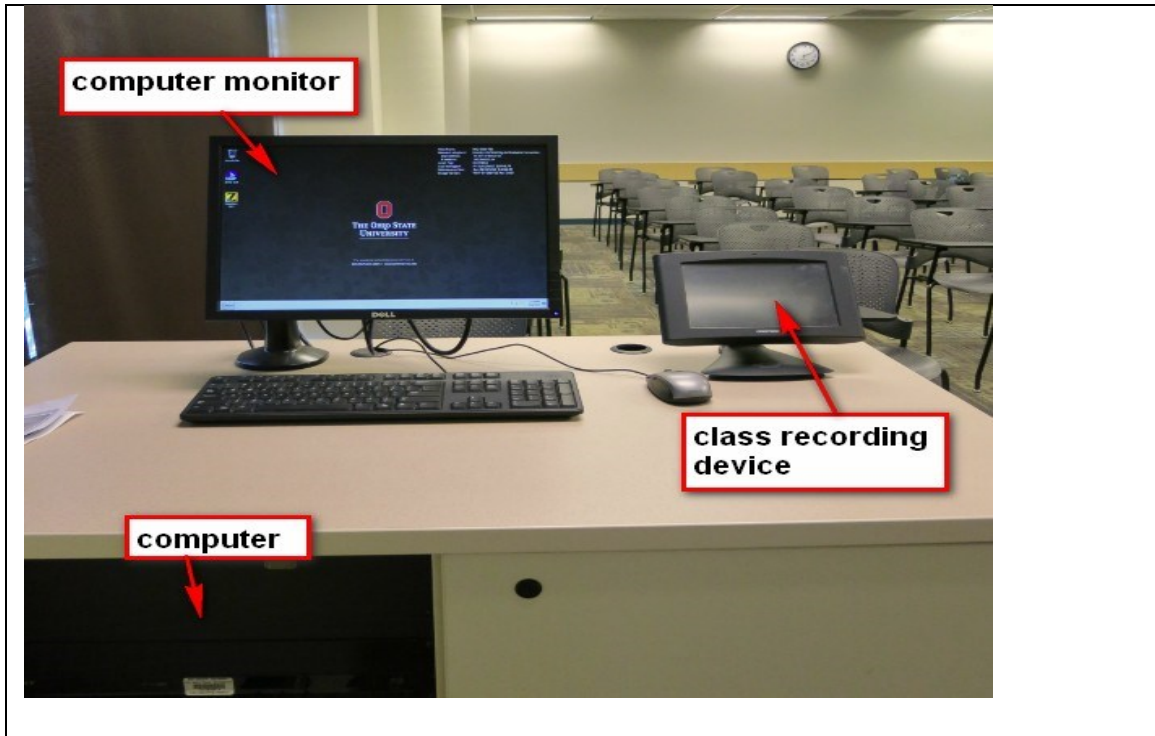
Chen, M. F. (Photographer). (2009, January 13). *A bonus for reporting a squid car or scooter* [Digital image]. Retrieved from <http://msnews.n.yam.com/mkarticle.php?article=20090720008553>

**Supplement 4-1 MSE's Computer Lab**



**Supplement 4-2 Up-close and Distant View of MSE's Classroom Instructional Technologies**





Supplement 4-3 Screenshots of a MSE Recorded Class Video

## Definitions of Corrosion

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D. A. Jones

"Destructive result of chemical reaction between a metal and its environment"

M. G. Fontana

"Deterioration of a material because of reaction with its environment"

→ R. M. Latanision

"Environmental degradation of materials"

### Examples:

- rusting of an iron pipe
- patina formation on a bronze statue
- cracking of heat exchanger tube in nuclear power plant
- deterioration of paint
- pitting of stainless steel

Deterioration by purely physical causes is not corrosion but is described as erosion, galling, or wear.

2

## Cost of Metallic Corrosion in US

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Source: 2002 Study by CC Technologies

△NV

[www.corrosioncost.com](http://www.corrosioncost.com)

- Direct cost of metallic corrosion in US: 3.1% of GNP, or \$450 billion/year in 2010
- Direct costs include use of more expensive material, labor, equipment, lost revenue, etc.
- Indirect costs such as lost productivity estimated to be equal to direct costs
- Largest sector: utilities, in particular, drinking water and sewer systems: \$36B/year in 2002
- Comparisons:
  - Health care \$2.3 trillion ←
  - Defense budget \$663 billion ←

# Corrosion and Safety

Corrosion can have catastrophic consequences:

- Boilers and other pressure vessels



- Submarines and ships

- Pipelines



San Bruno, CA  
pipeline rupture

- Nuclear power plants and waste containers

- Bridges



I-35 bridge  
collapse

- Aging aircraft

Aloha Airlines incident, 1988

Transcription from 39:40 ~40:23

Safety is an issue. So, as I said boilers often have environmental components and boilers associated with catastrophic consequences. So, pressure vessels, when they when they fail, there's often a massive amount of damage that is done. Submarines are actually a type of pressure vessels. And, if you are in a submarine, you are hoping it is not going to fail massively. Submarines and ships clearly are exposed to corrosive environments and consequently fight corrosion. Pipelines are interesting one.



**Supplement 4-4 An Excerpt from Cheng Rui's Reading and Note-Taking Document**

1. J. E. Draley, Aqueous corrosion of 1100 aluminum and of aluminum-nickel alloys, Proceedings of AEC-Euratom Conference on Aqueous Corrosion of reactor materials, Brussels, Oct. 14-17, 1959, U.S. Atomic Energy Commission TID7587, PP 165-187.

- No gross pitting occurs, although micropits of the order of 20 microns in diameter form. These do not grow in size, but their number increases. Localized, self-stifling reaction is indicated.
- After sufficiently extended exposure, bits of the corrosion product slough or flake off, leaving a metallic sheen. The corrosion product does not grow thick in those places, and there is no observable increase in corrosion of the specimens. It is apparent that, at least at long exposure times, the protective oxide is thin and the bulk of the corrosion product coating is not significantly protective.

2. A. B. McKee, R. H. Brown, Resistance of Aluminum to corrosion in solutions containing various anions and cations, Corrosion 3 595-612, 1947.

**Abstract:** The rate of corrosion of aluminum is controlled by the protective oxide film which forms when an aluminum surface is exposed to the atmosphere. This thin film, although very thin and usually invisible to the unaided eye, is highly protective and resists attack under many conditions of service. It is to this inert film that aluminum owes its inherent high resistance to corrosion. **The corrosion mechanism for aluminum in neutral or nearly neutral solutions is usually accomplished by the formation of additional hydrated aluminum oxide which deposits on the surface of the metal and tends to serve as a barrier to further attack.** For this reason the attack by some solutions may be relatively rapid at first, but as the insoluble products of the reaction are formed, an adherent, continuous

film covers the metal which further reduces the probability of contact of the solution with the underlying metal and as a result the corrosion stops or is reduced to a very low rate.

## Supplement 4-5 An Excerpt from Cheng Rui's Conference Proposal and Advisor's feedback

### Abstract

Localized corrosion of aluminum alloys has been widely studied as a major cause of fatigue and crack in many applications, which also deteriorate mechanical properties of materials significantly. In order to provide a precise pit growth prediction under various environmental conditions (temperature, pH, and chloride concentration), a comprehensive investigation is necessary to model pit growth kinetics. However, pit growth could be underestimated without considering uniform corrosion. In fact, uniform corrosion could be considerable in certain environment associate with pitting. Therefore, this work aims to modify pit growth model by involving uniform corrosion of aluminum alloys, and to study mechanisms of uniform corrosion in various environment.

For uniform corrosion of aluminum alloys, oxygen reduction reaction (ORR) and hydrogen evolution are two main cathodic reactions. It is noteworthy that temperature change has substantial effect on corrosion rate in different pH. For instance, high temperature solution has moderate corrosion rate in alkaline condition, while low temperature solution corrodes significantly in high pH. In contrast, high temperature solution has faster uniform corrosion rate than low temperature samples in low pH condition, which indicates that oxygen solubility is low at elevated temperature. Reduced oxygen concentration suppressed ORR and therefore less uniform corrosion occurs. Similarly, in acidic environment, it is hydrogen evolution dominates cathodic

Pitting corrosion and uniform dissolution of aluminum alloys 2024-T3, 7075-T6 and 6061-T6 were characterized quantitatively using optical profilometry after free corrosion exposures in 1.0 M NaCl solutions as a function of pH, temperature and exposure time. A full factorial exposure experiment was carried out for each alloy. Exposure duration intervals were 1 day, 1 week, and 1 month; pH levels were 3, 5, 8 and 10; and temperature levels were 20, 40, 60, and 80°C. Small 16A x 16B mm samples were

.....

Results showed . . . pick three key and interesting results . . .

One on environment

One on alloy composition or metallurgy

One on the relative depths of uniform corrosion and pitting corrosion.

↵

In this presentation, details of the experimental method and the results will be presented and the implication of these results on corrosion damage accumulation pit depth modeling will be addressed.

Supplement 4-6 Cheng-Rui's Print-Out with Highlights and Notes

Z. Szklarska-Smialowska / Corrosion Science 41 (1999) 1743-1767 1753

Fig. 6. Relationship between peak pit currents and apparent pit radii at peak pit current for a large population of metastable and stable pitting current spikes [48].

Pride et al. found that the **apparent metastable pit current density is  $\sim 0.1$  to  $10 \text{ A/cm}^2$  and the apparent metastable pit radius is  $\sim 0.1$ – $6 \text{ }\mu\text{m}$ .**

Scully [49] also studied the metastable pitting of Al-Cu thin films in a diluted HF solution and discovered that the **0-phase plays a dual role: it raises the potential to promote the metastable pitting initiation and supports cathodic reactions to sustain the pit growth.** He suggests that metastable pitting at the open circuit potential **may be cathodically limited.**

Buzza and Aikire [50] demonstrated that the pit stability depends on the pit size, the duration of time lapse at the open circuit potential and upon applied potential. These results were interpreted to mean that at a particular applied potential the critical concentration adjacent to the pit surface is required if the pit is to remain active.

Frankel et al. [1] suggested that **metastable pitting formed on stainless steel is stabilized by the ohmic drop associated with the porous pit cover and that repassivation is expected to occur if the pit cover ruptures.** When the cap on the pit is broken the pit solution is diluted and repassivation occurs.

$10^{-2} \text{ A/cm}^2$

$i \sim 0.1 - 10 \text{ A/cm}^2$ , radius  $\sim 0.1 - 6 \text{ }\mu\text{m}$ .

\* metastable pit could be cathodically limited at OCP.

Supplement 4-7 Screenshots of MSE Related Search Engines and Databases Cheng-

Rui Uses

1. Science gateway (Look for papers and a journal's impact factor)

<http://www.sciencegateway.org/rank/index.html>

The screenshot shows the Science Gateway website interface. At the top, there is a search bar with 'Google Web' and a 'Go' button. Below the search bar is a navigation menu with categories: Literature, Tools, Catalogs, Protocols, Jobs, Events, Resources, Rank, and Reference. The 'Rank' category is selected, leading to a page titled 'High Impact Journals'. The page is divided into several columns: 'Web' (with a search bar), 'High Impact Journals' (listing various scientific fields like Acoustics, Agriculture, Agronomy, Allergy, Anthropology, Anatomy & Morphology, Anesthesiology, Applied Linguistics, Applied Mathematics, Artificial Intelligence, Astronomy & Astrophysics, Business, Chemical Engineering, Chemistry, Communication, Condensed-Matter Physics, Criminology & Penology, Crystallography, Demography, Dermatology, Dentistry, Oral Surgery & Med, Developmental Biology, Ecology & Environmental Sci, Economics, Education/Educational Research, Electrical & Electronic Eng, Endocrinology & Metabolism, Energy & Fuels, Entomology, Environmental Studies, Family Studies, Finance, Food Sciences & Technology, Forestry, Gastroenterology & Hepatology, Geography, Geology, Geriatrics & Gerontology, Health Policy & Services, Hematology, Immunology, Infectious Diseases, Information & Library Science, Inorganic & Nuclear Chemistry, International Relations, Law, Linguistics, Neurosciences, Nursing, Obstetrics & Gynecology, Oceanography, Ophthalmology, Optics, Organic Chemistry, Ornithology, Paleontology, Parasitology, Pathology, Pediatrics, Physics, Physics - Fluids & Plasmas, Plant Sciences, Political Science, Psychiatry, Robotics, Sociology, Soil Science, Spectroscopy, Sport Sciences, Statistics & Probability, Substance Abuse, Surgery, Urology & Nephrology, Veterinary Sciences, Virology, Water Resources, Zoology), 'Most Cited Authors' (listing fields like Economics & Business, Environment/Ecology, Geosciences, Immunology, Microbiology, Neuroscience, Plant Sciences, Psychiatry/Psychology, Space Science, Sciencewatch Citation Laureates), 'Most Cited/High Impact Institutions' (listing fields like Multidisciplinary Fields, Agricultural Science, Chemistry, Computer Science, Economics & Business, Engineering, Envir/Ecology, Immunology, Materials Science, Molecular Biology, Neurosci & Behavior, Oceanography, Social Sciences, Space Science), 'Journal Impact Factor' (listing 'Ranks by Citation Impact', 'SCImago Country Rankings', 'SCImago Journal Rankings', 'TOP 20 Countries in Science Output', 'TOP 20 Most Cited Countries', 'TOP 10 Most Cited Journals', 'TOP 10 Most-Profic Journals', 'TOP 10 High Impact Journals', 'TOP 10 High Impact Countries'), and 'Most Cited Countries' (listing 'Geosciences', 'Immunology', 'Material Science', 'Psychiatry & Psychology'). There is also a small advertisement for 'NO CONTRACTS' on the right side.

2. Engineering village (Look for engineering related papers )

[http://www.engineeringvillage.com/search/quick.url?EISESSION=1\\_18e854112b61a059705b77ses2&CID=quickSearch&database=1](http://www.engineeringvillage.com/search/quick.url?EISESSION=1_18e854112b61a059705b77ses2&CID=quickSearch&database=1)

The screenshot displays the Engineering Village search interface. At the top, the logo and navigation links (Search, Selected records, Settings, Tags & Groups) are visible. The main search area is divided into 'Quick Search', 'Expert Search', and 'Thesaurus Search' tabs. The 'Quick Search' section includes a 'DATABASE' dropdown (with 'Compendex' selected), a 'SEARCH FOR' input field, and 'AND' operators. Below this are 'LIMIT TO' options for document types, treatment types, languages, and dates (1884 to 2015). The 'SORT BY' section offers 'Relevance' (selected) and 'Date (Newest)' options, along with an 'Autostemming off' checkbox. A 'Search' button is present. To the right, there are several utility panels: 'Browse Indexes' (listing Author, Affiliation, etc.), 'Latest Resources' (Getting Started, Training, etc.), 'More Sources' (Show), and 'Interactive Equations and Tools' (Sample Equations, Unit Converter, Periodic Table). A 'Search history' section at the bottom left shows no recent searches. The footer contains 'About' information for Ei, Engineering Village, and Elsevier, along with a copyright notice for 2015.

### 3. Knovel aluminum alloy database

[http://app.knovel.com/web/toc.v/cid:kpAAD00001/viewerType:toc/root\\_slug:aluminum-alloy-database/url\\_slug:aluminum-alloy-database/](http://app.knovel.com/web/toc.v/cid:kpAAD00001/viewerType:toc/root_slug:aluminum-alloy-database/url_slug:aluminum-alloy-database/)

The screenshot displays the Knovel Aluminum Alloy Database interface. At the top, there is a navigation bar with 'Home', 'Browse', and 'Tools' options, along with a search bar and a 'GO' button. Below the navigation bar, a yellow banner promotes the 'The Knovel Academic Challenge'. The main content area features the database title 'Aluminum Alloy Database' and the author 'Kaufman, J. Gilbert'. A 'DESCRIPTION OF DATA' section provides a summary of the database's content. On the left side, there is a sidebar with metadata including 'ELECTRONIC ISBN: 978-1-59124-071-8', 'PUBLISHER: Knovel', 'RELEASE DATE: 2004-05-11', 'LINKS: Video Tutorials', and 'KNOVEL SUBJECT AREA(S) Metals & Metallurgy'. The right side of the page shows a 'Database Contents' table with columns for 'SECTION' and 'FEATURES'. The table lists various sections such as 'Standard Knovel Disclaimer', 'Front Matter', 'Introduction', and several tables (1a, 1b, 2a, 2b, 3, 4a, 4b) detailing compositions and physical properties of aluminum alloys.

SECTION	FEATURES
Standard Knovel Disclaimer	
Front Matter	
Introduction	
Introduction to 2006 Update	
Table 1a. Nominal Compositions for Cast Aluminum Alloys	
Table 1b. Composition Limits for Cast Aluminum Alloys	
Table 2a. Nominal Compositions for Wrought Aluminum Alloys	
Table 2b. Composition Limits for Wrought Aluminum Alloys	
Table 3. Applications of Wrought and Cast Aluminum Alloys	
Table 4a. Typical Physical Properties of Wrought Aluminum Alloys (US Customary Units)	
Table 4b. Typical Physical Properties of Wrought Aluminum Alloys (Metric Units)	

4. CorrDefense

(U.S. Department of Defense database sponsored by the Office of the Under Secretary of Defense for Acquisition Technology and Logistics and Office of Corrosion Policy and Oversight; Cheng Rui's research area is corrosion.)

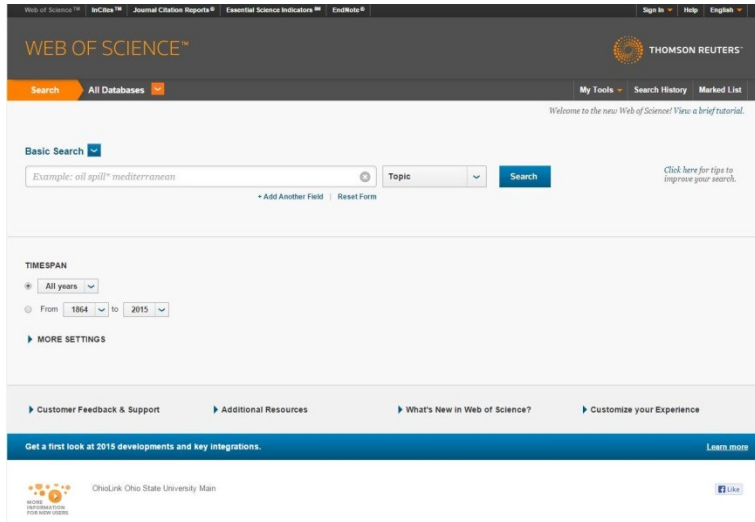
[http://corrdefense.nace.org/corrdefense\\_Winter\\_2014/index.asp](http://corrdefense.nace.org/corrdefense_Winter_2014/index.asp)

The screenshot shows the homepage of the CorrDefense website. The header features the title "CorrDefense" and the subtitle "DoD News about Preserving Military Assets". A navigation menu includes links for HOME, FEATURES, INSIDE DOD, NEW TECHNOLOGY, COST OF CORROSION, PREVIOUS ISSUES, CORRDEFENSE.org, and CONTACT US. The main content area is divided into several sections: a featured article titled "Army Secretary Approves the Formation of a New Army Corrosion Board" with a "LEARN MORE" link; a "FEATURES" section listing three articles; an "INSIDE DoD" section with one article; an "INTERNATIONAL" section with a link to "DoD-Allied Nations Technical Corrosion Conference" (abstract deadline: Nov. 20, 2014); a "NEW VIDEO RELEASE" section with a video player for "DoD Accelerate"; and a "DOD-SPONSORED TRAINING" section listing three courses. At the bottom, it indicates "Vol. 10, No. 3, Winter 2014" and provides a link to "Download this issue in pdf format".



5. Web of Science

[http://apps.webofknowledge.com/UA\\_GeneralSearch\\_input.do?product=UA&search\\_mode=GeneralSearch&SID=4CrSIInwCK1akoUl6uq&preferencesSaved=](http://apps.webofknowledge.com/UA_GeneralSearch_input.do?product=UA&search_mode=GeneralSearch&SID=4CrSIInwCK1akoUl6uq&preferencesSaved=)



6. Materials library by University of Cambridge

<http://www.msm.cam.ac.uk/map/map.html>

MAP Program & Data Library Contents		
<b>Steel</b> Complete programs Subroutines Functions Modules	<b>Nickel Alloys</b> Complete programs Subroutines Functions Modules	<b>Aluminium Alloys</b> Complete Programs Subroutines Functions Modules
<b>Polymers</b> Complete programs Subroutines Functions	<b>Crystallography</b> Complete programs Subroutines Functions	<b>Materials Data Library</b> General materials data Work metal properties Transformation data Thermodynamic data
<b>General Kinetic Theory</b> Complete programs Subroutines Functions	<b>Neural Networks</b> Complete programs Subroutines Functions Datasets	<b>Composite Materials</b> Complete programs Subroutines Functions
<b>Quantitative Metallurgy</b> Complete programs Subroutines Functions	<b>General Purpose Utilities</b> Complete Programs Subroutines Functions Modules	<b>MAP Constants</b> Physical constants Available as a single tar file

## 7. The NIST X-ray Photoelectron Spectroscopy Database

[http://srdata.nist.gov/xps/main\\_search\\_menu.aspx](http://srdata.nist.gov/xps/main_search_menu.aspx)

The screenshot shows the NIST XPS Database search menu. On the left is a navigation menu with links: XPS Home, Introduction, Search Menu, Data Field Definitions, XPS History, Disclaimer, Acknowledgments, Contact Information, FAQs, and Rate Our Products. The main content area is titled 'XPS Home' and contains several search options with expandable arrows: 'Identify Unknown Spectral Lines', 'Retrieve Data for Selected Elements', 'Retrieve Data for a Selected Element', 'Display Wagner Plot', 'Retrieve Data for Selected Compounds', and 'Retrieve Data by Scientific Citation'. Below these is an 'Instructions' section with a bullet point: 'Click on solid arrows at left to display additional choices.' At the bottom, there is a copyright notice: '©2012 copyright by the U.S. Secretary of Commerce on behalf of the United States of America. All rights reserved.' and a distribution statement: 'Distributed by the Measurement Services Division of the National Institute of Standards and Technology (NIST) Material Measurement Laboratory (MML). NIST is an agency of the U.S. Department of Commerce.' The page also includes a 'Last updated' date (September 15, 2012) and a 'Created' date (June 06, 2000). At the very bottom, there are links for 'NIST Home Page', 'NIST Data Gateway', 'NIST Databases', 'Privacy Policy', 'Security Notice', and 'Accessibility Statement'.

## 8. U.S. National Institute of Standards and Technology's chemistry webbook

<http://webbook.nist.gov/chemistry/>

### NIST Chemistry WebBook

#### NIST Standard Reference Database Number 69

View: Search Options, Models and Tools, Special Data Collections, Documentation, Changes, Notes

#### Show Credits

NIST reserves the right to charge for access to this database in the future.

#### Search Options top

- | General Searches  | Physical Property Based Searches   |
|---|--|
| <ul style="list-style-type: none"><li>• Formula</li><li>• Name</li><li>• IUPAC identifier</li><li>• CAS registry number</li><li>• Reaction</li><li>• Author</li><li>• Structure</li></ul> | <ul style="list-style-type: none"><li>• Ion energetics properties</li><li>• Vibrational and electronic energies</li><li>• Molecular weight</li></ul> |

#### Models and Tools top

- Thermophysical Properties of Fluid Systems: High accuracy data for a select group of fluids.
- Group Additivity Based Estimates: Estimates of gas phase thermodynamic properties based on a submitted structure.
- Formula Browser: Locates chemical species by building up a chemical formula in Hill order.

#### Special Data Collections top

- Benchmark Spray Combustion Database: A collection of spray combustion data from experiments conducted at NIST.
- Droplet Laden Flow Data: Results from experiments involving flow over cylinders.

#### Documentation top

- Frequently asked questions
- Version history
- A Guide to the NIST Chemistry WebBook: A guide to this site and the data available from it.
- Gas-Phase Ion Thermochemistry: An in-depth explanation of gas phase ion data available from this site.
- NIST Organic Thermochemistry Archive: A description of the primary source of thermochemical data for this site.
- Organometallic Thermochemistry Database: A description of the organometallic thermochemistry database included in this site.
- Vibrational and Electronic Energy Levels of Polyatomic Transient Molecules: A description of vibrational and electronic energy level data for molecules with three or more atoms.
- Computed 3-D Structures: A description of the manner in which the 3 dimensional structures on this site were generated.

## 9. International National Association of Corrosion Engineers

<http://www.nace.org/home.aspx>

The screenshot shows the NACE International Foundation website. At the top left is the NACE logo. A navigation menu includes Home, About Us, Scholarships, Programs, Events, Get Involved, Student Resources, and Press Room. A search bar is located on the right. The main banner features a large image of a port with a ship and the text "Inspiring the next generation of corrosion professionals". Below the banner are several content blocks: "Latest News & Events" with sections for "2015 SCHOLARSHIPS", "NEW Outstanding Student Award", and "SUPPORT OUR TROOPS!"; a "NACE Foundation of Canada Annual Support Drive" with a "Donate Now" button; and a "NACE Foundation Annual Support Drive" with a "Donate Now" button. A "POWERED BY RAZOO" logo is visible at the bottom right.

## 10. ASM Handbooks <http://products.asminternational.org/hbk/index.jsp>

The screenshot shows the ASM Handbooks Online website. The header includes "ASM MATERIALS INFORMATION" and "ASM Handbooks Online™". A "CONTENTS" section lists 23 ASM Handbook volumes, including Properties and Selection, Heat Treating, Welding, Mechanical Testing, and Corrosion. A search bar is prominently displayed with the text "I want to find information on a specific subject or material". Below the search bar are navigation links for "What's new?", "Give us your feedback", "Subscription information", and "Become a contributing author". The footer includes the ASM and GRANTA logos and the copyright notice "COPYRIGHT © ASM INTERNATIONAL 2014".

Supplement 4-8 Screenshots of Taiwan Yahoo Dictionary

The screenshot displays the Yahoo! Dictionary interface. At the top left is the 'YAHOO! 奇摩 字典' logo. A search bar at the top right contains the text 'look for'. Below the search bar, a blue navigation bar features a '字典' (Dictionary) tab and a search input field with 'look for' entered. The main content area shows the search results for 'look for'.

**look for**<sup>1</sup> Dr.eye 譯典通片語詞典

尋找; 期待

同義詞 seek for, seek after, search for, search after

**相關詞**

- look for trouble
- look for a needle in a haystack
- look for trouble
- look for trouble
- look for a needle in a haystack
- look for a needle in a haystack
- look bad for sb.

» 查看全部

---

**釋義** **相關詞** 鍵盤捷徑：按 A 可全選目前查詢單字、S 可快速發音

1. 尋找; 期待

I ' m **looking for** my dictionary . Do you know where it is ? 我在找字典, 你知道它在哪裡?

I don ' t **look for** much profit from the business . 我並不期待生意上有多大的收穫。

**其他解釋**

**look for**<sup>2</sup> Dr.eye 譯典通

尋找

Supplement 4-9 A screenshot of Dictionary App



**Supplement 4-10 A Screenshot of the First 20 Entries from 18,843 in Corpus of Contemporary American English (COCA) for the Search Phrase “look for”**

The screenshot shows the COCA search interface. At the top, there is a navigation bar with 'SEARCH', 'FREQUENCY', 'CONTEXT', and 'OVERVIEW' tabs. Below this, there are search controls including 'FIND SAMPLE: 100 200 500 1000' and 'PAGE: << < 1 / 189 > >>'. The main area displays a table of search results for the phrase 'look for'. Each row includes a row number, year, source, and a snippet of text with the search phrase highlighted in green. The table is partially obscured by a vertical scrollbar on the right.

Row	Year	Source	Snippet
1	2015	NEWS WashPost	A B C here," Baker said. She even moved to Washington in July to <b>look for</b> jobs in person. "I network really hard," she said.
2	2015	NEWS WashPost	A B C But 16th Street is hemmed in by Rock Creek Park on its west side. <b>Look for</b> extensive traffic delays. New Metrorail cars. Ah, much better. The
3	2015	NEWS WashPost	A B C , Obama told reporters that he agreed with some of Romney's ideas and might <b>look for</b> ways to work with him. But after their lunch at the White House
4	2015	NEWS WashPost	A B C from Touchstone and went to Africa on his own dime to work the ground and <b>look for</b> businesses. He met with entrepreneurs in Uganda, Nigeria, Rwanda, T
5	2015	NEWS WashPost	A B C George's Audubon Society and Patuxent Bird Club sponsor this hike through various habitats to <b>look for</b> woodland and field songbirds, waterfowl and raptor
6	2015	NEWS NYTimes	A B C played for money. And, no, he does not make the Secret Service <b>look for</b> his errant shots. (" They are pretty far back," one
7	2015	NEWS NYTimes	A B C merely to catalog the aromas and flavors we may detect with a taste. We <b>look for</b> the story conveyed in good wines by those outward characteristics, and we
8	2015	NEWS NYTimes	A B C , they're overconfident. " Millions of Americans who have been too discouraged to <b>look for</b> work because of weakness in the labor market largely remained o
9	2015	NEWS NYTimes	A B C An airline might seem like an odd literary patron. But as publishers and writers <b>look for</b> new ways to reach readers in a shaly retail climate, many have form
10	2015	NEWS NYTimes	A B C . " Without a card, we feel it's unsafe to go out and <b>look for</b> work, or even visit friends. " The police check: Where
11	2015	NEWS NYTimes	A B C background is matched by his unconventional approach to managing a campaign. While some candidates <b>look for</b> a manager who will rein in their impulses,
12	2015	NEWS NYTimes	A B C 's play encourages us to see a hoary theatrical form with X-ray eyes -- to <b>look for</b> the plasterboard behind the wallpaper and the skull beneath the skin (1:25)
13	2015	NEWS Atlanta	A B C Atlanta-based cookbook author and registered dietitian. She can be reached by email at susan7daymenu.com <b>Look for</b> Susan's book, " The 7-Day Menu Plan
14	2015	NEWS Atlanta	A B C . " Productivity is an ongoing process at The Coca-Cola Company. We will continuously <b>look for</b> ways to streamline our business and drive growth as our busi
15	2015	NEWS Atlanta	A B C Sheeran isn't a front-runner for the more prestigious album of the year category, <b>look for</b> him to grab this one. Who should win: It's hard to
16	2015	NEWS Atlanta	A B C concerts. This will be the 19th year she has covered the awards show. <b>Look for</b> Melissa's interview with nominee Sharon Jones in Sunday's Living & Arts secti
17	2015	NEWS Atlanta	A B C Atlanta-based cookbook author and registered dietitian. She can be reached by email at susan7daymenu.com <b>Look for</b> Susan's book, " The 7-Day Menu Plan
18	2015	NEWS Atlanta	A B C full Smoking: no Noise level: moderate Patio: a small one, but <b>look for</b> an expansion in April. Takeout: yes. Address, telephone: 678
19	2015	NEWS Atlanta	A B C and two Mississippi dailies. Staples was recently promoted to Senior Features Enterprise Writer. <b>Look for</b> her thrice-weekly column, This Life, in Living and Me
20	2015	NEWS Atlanta	A B C Atlanta-based cookbook author and registered dietitian. She can be reached by email at susan7daymenu.com <b>Look for</b> Susan's book, " The 7-Day Menu Plan

## Supplement 4-11 The discussion group, Oil and Gas Corrosion and Material Selection, in LinkedIn and its discussion posts

The screenshot shows a LinkedIn group page for "Oil and Gas Corrosion and Material Selection" with 33,258 members. The main discussion post is by hasan eghbaly, an engineering top contributor, asking about the best action for removing corrosion products from pitting areas. A comment by Ajit Mishra, a staff engineer at Haynes International, provides a detailed technical response based on his experience with Ni-Cr-Mo alloys. The page also features a "Top Contributors" section, a "Your group contribution level" progress bar, and "Ads By LinkedIn Members" including biosafety tips and proteomic data workflows.

**Oil and Gas Corrosion and Material Selection** 33,258 members [Member](#)

**Discussions** Promotions Jobs Members Search

**removing corrosion product on the pitting area**

hasan eghbaly  
engineering  
Top Contributor

Hi.  
What is the action for corrosion product on the pitting area?  
Is it good to remove this corrosion product? Why? corrosion product act as a corrosion inhibitor?  
We have pitting corrosion in a tank and decide to remove corrosion product ( for example by a brush).  
Tank contain demin water and we can not paint it to reduce corrosion.

+ Follow hasan

Like (4) • Comment (13) • Follow • Reply Privately • 2 days ago

**Comments**

Mohammed Siraj, Mehdi Mehdizadeh and 2 others like this  
13 comments • Jump to most recent comment

**Ajit Mishra**  
Staff Engineer at Haynes International

Ajit

It is a very interesting question and I guess it depends upon the system. Whenever people see/hear about corrosion product we always think it as a detrimental product. Based on my own experience, in case of corrosion resistant Ni-Cr-Mo alloy (particularly high Mo), we observed that it is the corrosion product which inhibits the crevice and stable pits to propagate. So, in those circumstances it can act as a physical barrier layer to localized corrosion propagation. However, in some system/environment there can be a possibility of filiform corrosion (not sure though) beneath the corrosion product.

Like • Reply privately • Flag as inappropriate • 2 days ago

**Anupam Gandhi**  
Managing Director at Gfluro coatings pvt ltd

Yes can contact

**Top Contributors in this Group**

hasan E.  
engineering  
Follow hasan

[See all members](#)

**Your group contribution level**

Start by commenting in a discussion. Group participants get 4x the number of profile views.

Getting Started

**Ads By LinkedIn Members**

**TEN TIPS** Biosafety Cabinet Tips  
Good technique will minimize air turbulence and cross contamination

**PCT HD for Biomarkers**  
Streamlined workflow: Biopsy Tissue to Proteomic data in 8 hours

**new row** Learn from anywhere now  
Online learning platform allows you to connect face-to-face on any device


**Subgroups**


# Wu, Ya-Li | The Use of Technology during Academic Acculturation: Case Studies of Chinese-Speaking International Doctoral Students

removing corrosion product on the pitting area Inbox x

 **Oil and Gas Corrosion and Material Selection** <groups-noreply@linkedin.com> [Unsubscribe](#)  
to me 


**LinkedIn**™ Groups


 **Trending discussions in:**  
Oil and Gas Corrosion and Material Selection

 [removing corrosion product on the pitting area](#)

hasan eghbaly  
Hi. What is the action for corrosion product on the pitting area? Is it good to remove this...

[View Discussion](#)

 Ashwini K Sinha  
Hasan, You have not mentioned about the tank metallurgy. If it...


 Mahboob Rana  
Scale/film and corrosion products are in general three distinct...

[+3 other new comments](#)

---

**Contribute to active discussions**

1 new comment

 [distinctive micro structure of high temperature alloys used in steam reforming](#)

Khushdeep Dhillon

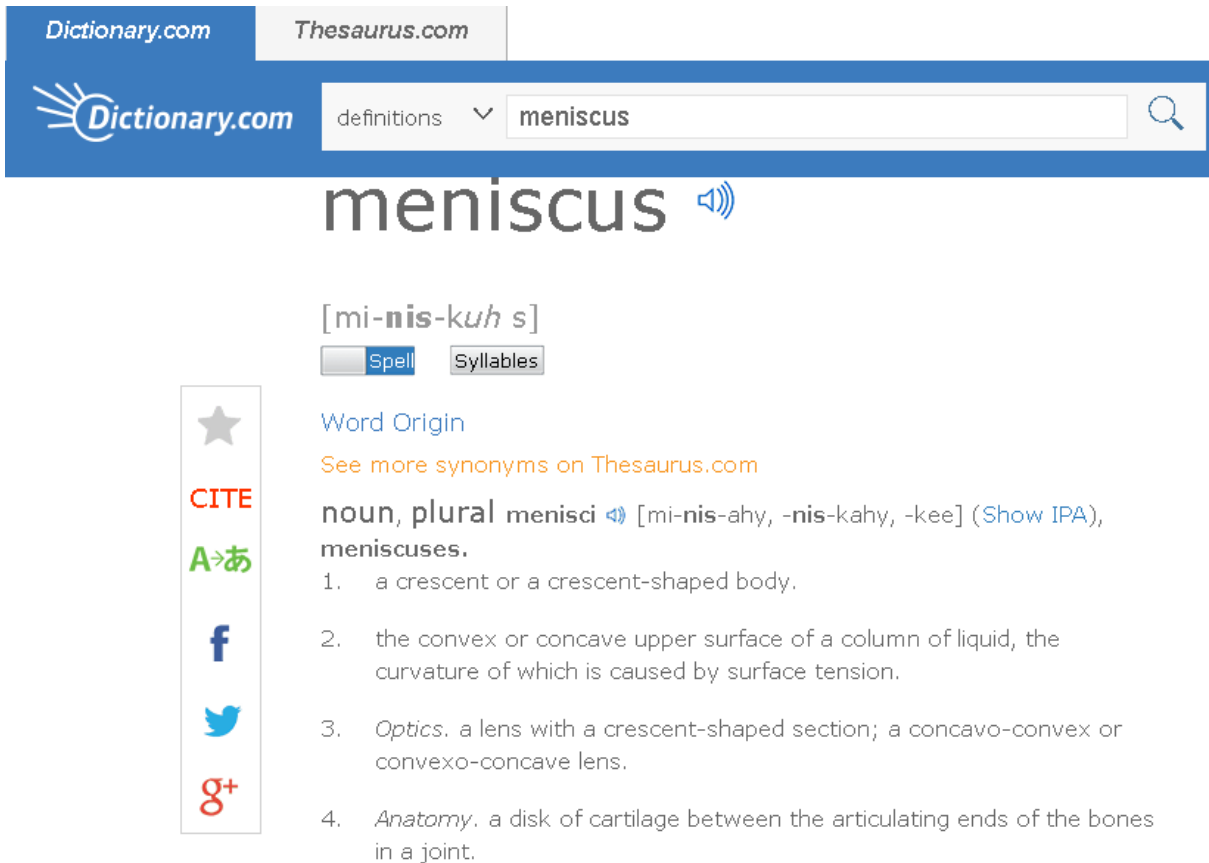


**Supplement 5-1 Before and After Edits of Excerpts for a Conference Proposal**

**Submitted by Zhi-Kai to His Advisor**

<b>Before edits</b>	<b>After edits</b>
<p><b>The two opening sentences</b></p> <p>Tuning is the process of calibrating the computer simulators to improve the representativeness of the simulation results to the physical experiments. Pareto Front is a popular trade-off solution for multiobjective optimization problems when a single optimal solution does not exist.....</p>	<p><b>The two opening sentences</b></p> <p>This research proposes a sequential method for determining the Pareto Front of a multioutput physical system based on a tuned simulator. The data are a fixed number of runs from the physical system and variable number of runs from a computer simulator of the physical system, where additional runs can be made from the simulator....</p>
<p><b>The last sentence</b></p> <p>The performance of this sequential design is compared with a space filling design using Hypervolume Indicator for assessment.</p>	<p><b>The last sentence</b></p> <p>Front accuracy, the sequential procedure is illustrated with examples from the multiobjective optimization literature.</p>

**Supplement 5-2 Two screenshots. One using Google Translate to find Chinese meanings of medical words and the second one using an online dictionary.**



### Supplement 5-3 A Screenshot of Google Dictionary Webpage

The screenshot shows the Google Dictionary interface for the word "indicate". The search bar at the top contains the word "indicate". Below the search bar, there are tabs for "All", "Images", "News", "Books", "Shopping", "More", and "Search tools". The search results show "About 318,000,000 results (0.58 seconds)".

The main content area displays the word "in·di·cate" with its phonetic transcription "/ˈɪndəˌkɑːt/" and the part of speech "verb". There are two definitions:

1. point out; show.  
"dotted lines indicate the text's margins"  
**synonyms:** specify, designate, mark, stipulate; show  
"please indicate your preferences on the form"
2. suggest as a desirable or necessary course of action.  
"the treatment is likely to be indicated in severely depressed patients"  
**synonyms:** advisable, recommended, suggested, desirable, preferable, best, sensible, wise, prudent, in someone's best interests; More

Annotations in red text with arrows point to specific parts of the page:

- An arrow points to the word "indicate" in the title, with the text: "each of synonyms can directly link to its own definition, synonyms, and examples".
- An arrow points to the example sentence "please indicate your preferences on the form", with the text: "an example of how to use 'indicate'".

At the bottom of the main content area, there is a dropdown arrow and the text "Translations, word origin, and more definitions".

Feedback

#### Indicate | Define Indicate at Dictionary.com

[www.dictionary.com/browse/indicate](http://www.dictionary.com/browse/indicate)

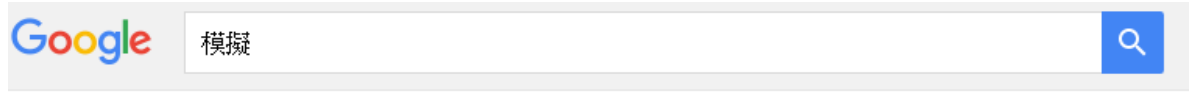
**Indicate** definition, to be a sign of; betoken; evidence; show: His hesitation really **indicates** his doubt about the venture. See more.

#### Indicate | Definition of Indicate by Merriam-Webster

[www.merriam-webster.com/dictionary/indicate](http://www.merriam-webster.com/dictionary/indicate) Merriam-Webster

to show (something) : to show that (something) exists or is true. : to direct attention to (someone or something) usually by pointing. : to show or suggest that ...

Supplement 5-4 A Screenshot of Searching for a Word via Google



All News Images Videos Maps More Search tools

About 501,000 results (0.56 seconds)

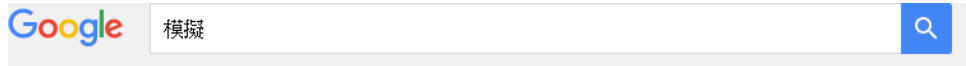
Chinese (Traditional) English

模擬 Edit simulation

4 more translations

Open in Google Translate

When you click the arrow, you will see the extended option



All News Images Videos Maps More Search tools

About 501,000 results (0.56 seconds)

Chinese (Traditional) English

模擬 Edit simulation

noun **simulation**  
模擬, 仿真, 假裝, 仿擬

**imitation**  
模擬, 冒充, 虛假, 虛設, 仿製品

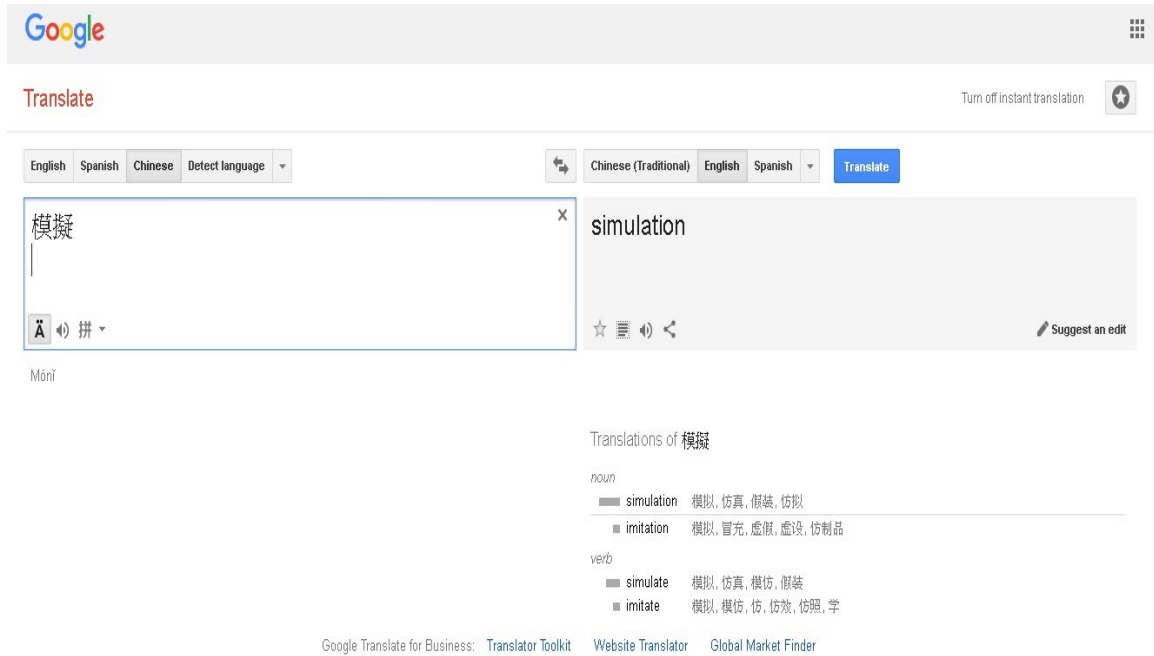
verb **simulate**  
模擬, 仿真, 模倣, 假裝

**imitate**  
模擬, 模仿, 模倣, 仿, 倣, 仿倣

Show less

Open in Google Translate

### Supplement 5-5 A Screenshot of Google Translate in Its Own Webpage



**Supplement 5-6 Zhi-Kai's Email Communication with One of His Advisors**

Thanks [advisor]!

Can you delete (2.4.7) without losing anything?

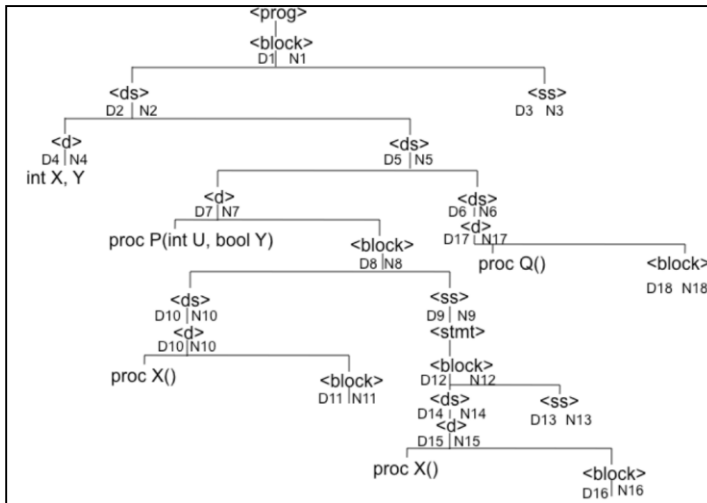
Yes, because I never used this formula again. Actually, this expression came from the Fricker et al. (2013) (see attached paper, page 50 on the top of right corner).

I keep assuming it must be right but it is not. Although I still don't know where it is wrong now, I will definitely try to figure it out.

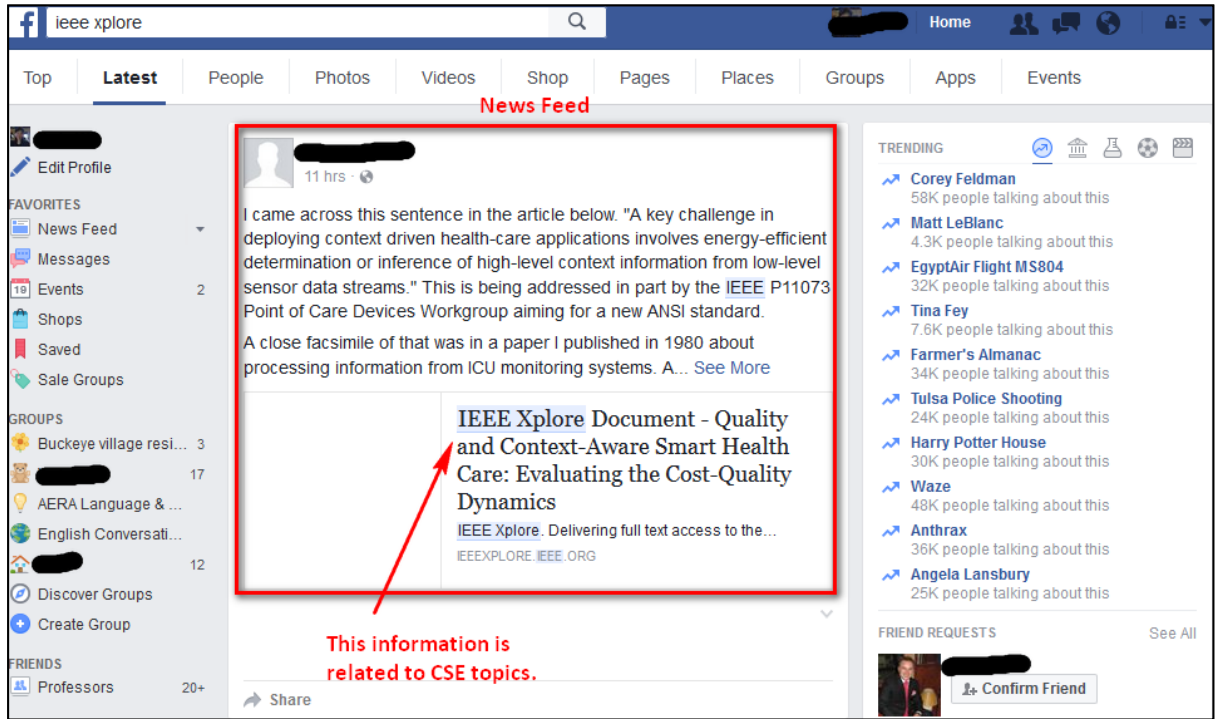
Thanks!

Zhi-Kai

**Supplement 6-1 Tian-You's Strategy Using a Diagram to Help Him Explain the Written Expression of His Answer**



**Supplement 6-2 A Screenshot of the News Feed Area on Facebook**





### Supplement 6-3 A Screenshot of Starkoverflow Discussion Forum

**How to combine multiple sed commands into one** ← The question was posted by a user of the forum, Puneet Jain.

asked today  
viewed 26 times  
active today

The description of the question

2

```
sed -i -E 's/(/$search_str"$X")["X"]/\1X/; ta' "$newfile"  
sed -i -E 's/([*]ExtData[*]"/"/([a] /Name-/\/Name-""$sep_list_Oled""/b); /Value=/b; n; b;  
sed -i -E 's/(/$search_str"$X")["X"]/\1X/; ta' "$newfile"  
sed -i -E 's/(/$search_str"$X")["X"]/\1X/; ta' "$newfile"
```

And i want to combine them say something like

```
sed -i -E 'command1' -e 'command2' -e 'command3' -e 'command4' "$newfile"
```

But it is not working. Because may be -E and -e can't be combine.

Please let me know.

Thanks !! Puneet

bash sed

show improve this question

edited 1 hour ago  
Mad Physicist  
8,540 ● 8 ● 22 ● 43

answered 1 hour ago  
Puneet Jain  
32 ● 6

The author of the question

148 People Chatting

JavaScript  
5 hours ago - little poosis

Podcast #472 — Jay Doesn't Get a Raise in This Podcast

3 Answers

active oldest votes

The 1st answer

3

✓

-E means "extended regex" and is a standalone flag, -e means "expression" and must be followed by a sed expression.

You can combine them, but each of your sed expression must be preceded by a -e if you want multiple of them, which isn't the case of your first one.

```
sed -i -E -e 'command1' -e 'command2' -e 'command3' -e 'command4' "$newfile"
```

A second option is to write each command in the same expression :

```
sed -i -E 'command1;command2;command3;command4' "$newfile"
```

However, since you're using labels I wouldn't rely on this option ; some implementations may not support it as John1024 pointed out.

Lastly, as mentioned by Mad Physicist, you can write your sed expressions to a file which you'll reference through the -f option.

The file must contain a single sed expression by line (you can write multiline expressions by suffixing each line but the last by a \, thus escaping the line-feed).

share improve this answer

edited Aug 24 at 23:59

answered Aug 24 at 18:33

Aaron  
6,818 ● 1 ● 8 ● 25

The answer was accepted by the author of the question.

The 1st answer was answered by Aaron.

Third alternative, put everything into a script. – Mad Physicist Aug 24 at 18:41

BSD sed may not support ; when combined with labels. The OP is using labels. – John1024 Aug 24 at 18:58

Supplement 6-4 A Screenshot of Tian-You's Notes on a Lecture Slide

## Collective Communication Operations

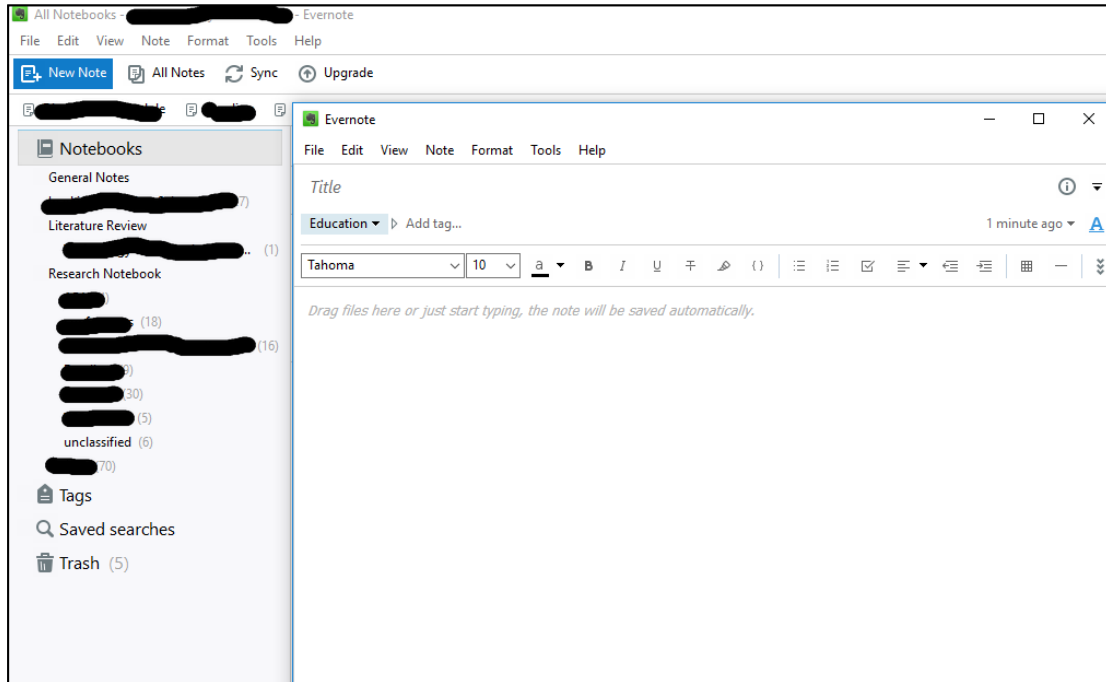
- **One-to-all communication**
  - **broadcast** => Non-Personalize
  - **scatter** => Personalize
- **All-to-one communication**
  - **reduce (combining operators)**
  - **gather**
- **All-to-all communication**
  - **all-broadcast** => all node broadcast
  - **complete exchange** => allscatter, most communication-intensive

Tian-You's notes appear in orange font.

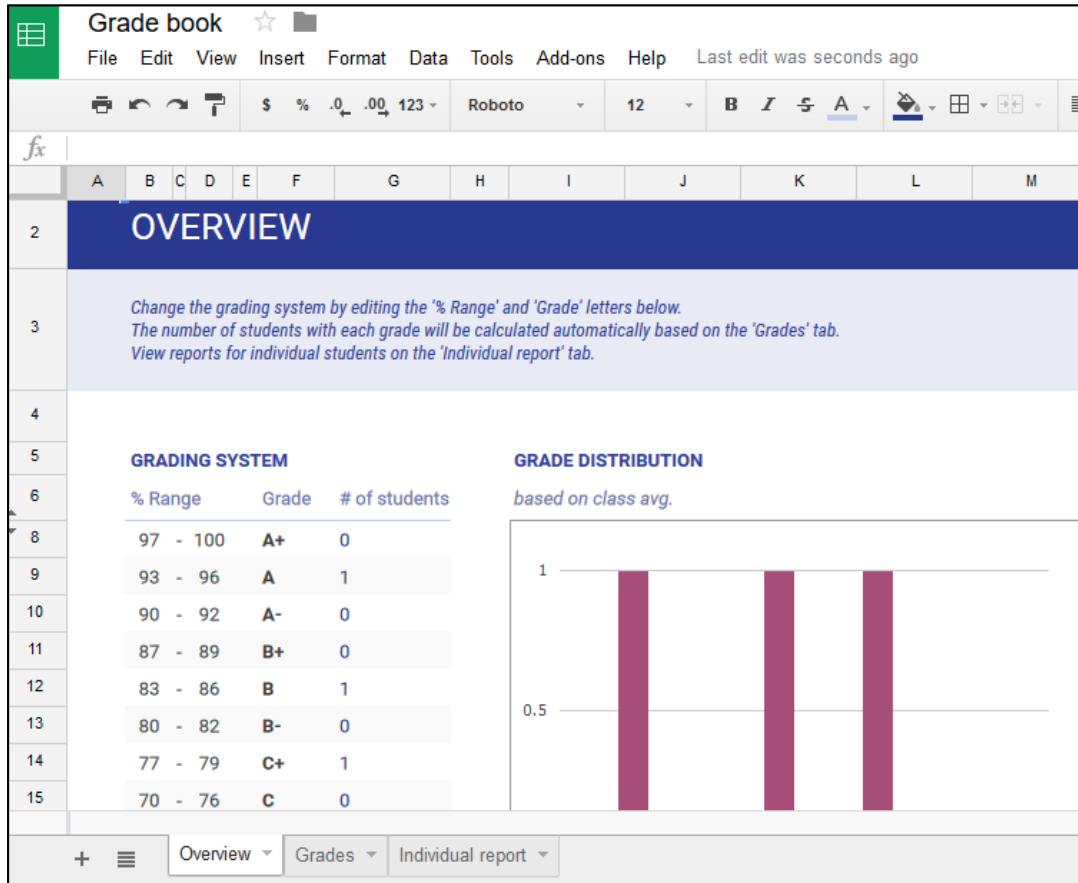
\*Traditionally, it was blocking communication=>Goal is to minimize latency  
MPI-3 introducing non-blocking schemes => Goal it to maximize overlap between communication and computation

3

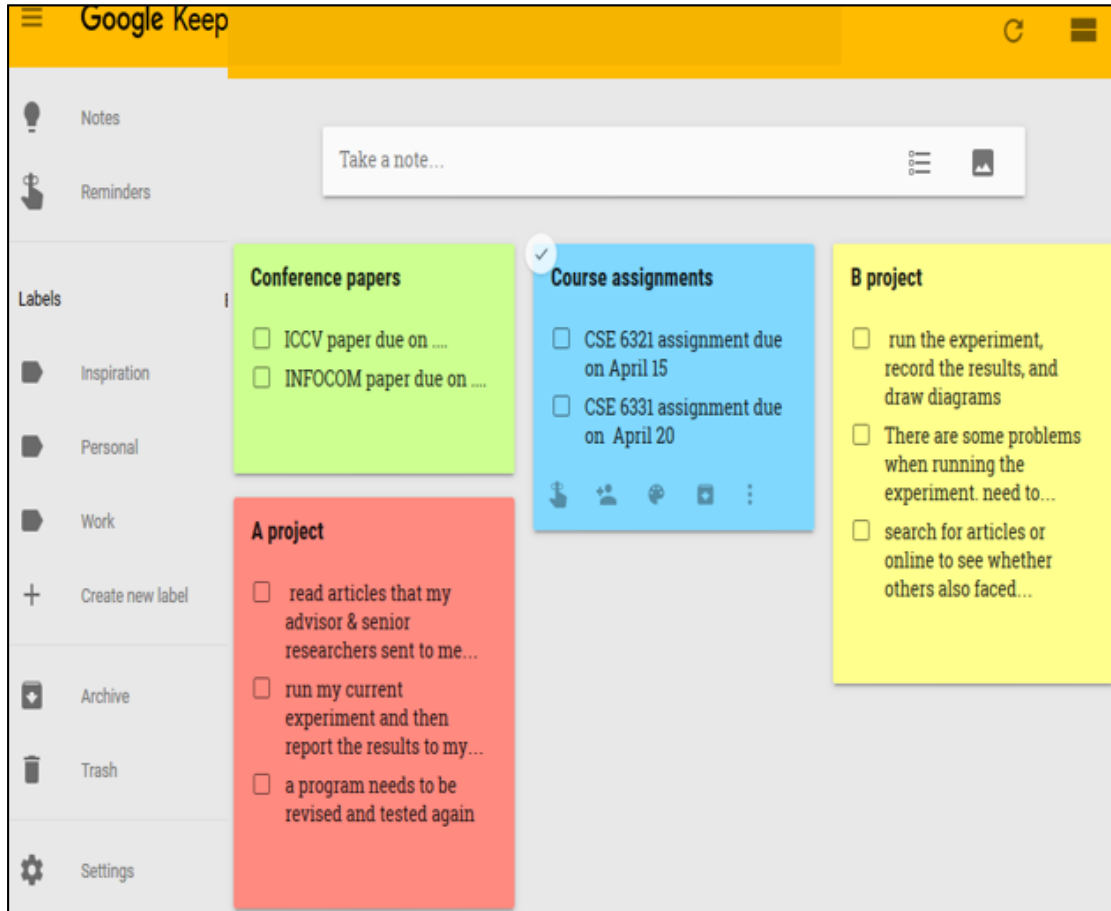
Supplement 6-5 A Screenshot of Evernote



### Supplement 6-6 A Screenshot of Google Sheet



### Supplement 6-7 A Screenshot of Google Keep



Note: Tian-You uses different colors to distinguish his different research projects.

Supplement 6-8 A Screenshot of Merriam-Webster Dictionary

The screenshot shows the Merriam-Webster website interface. At the top, there is a navigation bar with the Merriam-Webster logo, the text 'SINCE 1828', and a search bar containing the word 'corroborate'. Below the navigation bar, the word 'corroborate' is displayed in a large font, with a pronunciation guide and a small audio icon. A red box highlights the 'Simple Definition of CORROBORATE' section, which states: 'to support or help prove (a statement, theory, etc.) by providing information or evidence'. Below this, the source is cited as 'Merriam-Webster's Learner's Dictionary'. There are two tabs: 'Examples: CORROBORATE in a sentence' and 'Tip: Synonym guide'. The 'Full Definition of CORROBORATE' section follows, including the word forms 'corroborated' and 'corroborating', the part of speech 'transitive verb', and the definition: 'to support with evidence or authority : make more certain'. It also lists related terms: 'corroboration' (noun) and 'corroborative' (adjective). A red box highlights the 'Examples of CORROBORATE in a sentence' section, which provides several example sentences with citations. Below this, the 'Origin and Etymology of CORROBORATE' section explains that it is a Latin word derived from 'corroborare', which is a combination of 'com-' and 'robor-'. A red box highlights the 'CORROBORATE Synonyms' section, which lists 'argue, attest, authenticate' and provides a link to 'm-w.com/thesaurus'. Finally, the 'Synonym Discussion of CORROBORATE' section discusses the nuances of 'CORROBORATE' compared to other synonyms like 'confirm', 'substantiate', 'verify', 'authenticate', and 'validate'.

Merriam-Webster SINCE 1828 Dictionary **corroborate**

# corroborate

verb | cor-rob-o-rate | \kə-ˈrā-bə-rāt\  
Popularity: Top 1% of lookups

**Simple Definition of CORROBORATE**  
: to support or help prove (a statement, theory, etc.) by providing information or evidence

Source: Merriam-Webster's Learner's Dictionary

Examples: CORROBORATE in a sentence Tip: Synonym guide

## Full Definition of CORROBORATE

**corroborated** **corroborating**  
transitive verb  
: to support with evidence or **authority** : make more certain

—**corroboration** \ˌˈrā-bə-ˈrā-shən\ noun  
—**corroborative** \ˌˈrā-bə-,rā-tiv-,ˈrā-b(ə-)rə\ adjective

**Examples of CORROBORATE in a sentence**

Studies that are wrong will be superseded by better studies with different results. Studies that are right will be *corroborated* by other good studies. —Harriet Hall, *Skeptic*, 2007

Evidence like this is rarely conclusive, but it can help police *corroborate* testimony ... —David Fisher, *Hard Evidence*, 1995

... the great Dr. Woodruff ... *corroborated* my doctor's belief that my two infections had been resolved ... —James Thurber, 7 Mar. 1946, in *Selected Letters Of James Thurber*, (1980) 1981

<the witnesses *corroborated* the policeman's testimony>

<my personal experience does not *corroborate* your faith in the essential goodness of people>

### Origin and Etymology of CORROBORATE

Latin *corroboratus*, past participle of *corroborare*, from *com-* + *robor-*, *robur*

### CORROBORATE Synonyms

Synonyms  
**argue, attest, authenticate**  
See more at [m-w.com/thesaurus](https://www.m-w.com/thesaurus)

### Synonym Discussion of CORROBORATE

**CONFIRM**, **CORROBORATE**, **SUBSTANTIATE**, **VERIFY**, **AUTHENTICATE**, **VALIDATE** mean to attest to the truth or validity of something. **CONFIRM** implies the removing of doubts by an authoritative statement or indisputable fact <*confirmed* the reports>. **CORROBORATE** suggests the strengthening of what is already partly established <witnesses *corroborated* his story>. **SUBSTANTIATE** implies the offering of evidence that sustains the contention <the claims have yet to be *substantiated*>. **VERIFY** implies the establishing of correspondence of actual facts or details with those proposed or guessed at <all statements of fact in the article have been *verified*>. **AUTHENTICATE** implies establishing genuineness by adducing legal or official documents or expert opinion <handwriting experts

Supplement 6-9 Screenshots of Dr. Eye Chinese-English Dictionary



Supplement 6-10 A Screenshot of the Google Dictionary

The screenshot shows the Google Dictionary entry for the word "corroborate". The search bar at the top contains "corroborate define". Below the search bar, there are navigation tabs for "All", "News", "Shopping", "Images", "Videos", "More", and "Search tools". The search results indicate "About 571,000 results (0.34 seconds)".

The main entry for "cor·rob·o·rate" includes the phonetic transcription /kəˈræbəˌrɑːt/ and identifies it as a verb. It lists the 3rd person present form (corroborates), past tense (corroborated), past participle (corroborated), and gerund or present participle (corroborating). The definition is "confirm or give support to (a statement, theory, or finding)", with an example: "the witness had corroborated the boy's account of the attack". Synonyms listed include confirm, verify, endorse, ratify, authenticate, validate, certify, support, back up, uphold, bear out, bear witness to, attest to, testify to, vouch for, give credence to, substantiate, and sustain. An antonym is contradict.

The "Origin" section shows a word tree starting from Latin "cor-" (together) and "roborare" (from "robur" meaning strength). The tree shows the progression: "corroborare" (Latin) → "corroborat-strengthened" (Latin) → "corroborate" (mid 16th century, meaning "make physically stronger").

At the bottom of the page, there is a "Translate corroborate to" dropdown menu set to "Chinese (Traditional)". A red box highlights the first translation result: "1. 證實". To the right of this box, a red text annotation reads: "The Chinese translation of the English word 'corroborate'".



Supplement 6-11 A Screenshot of Explanations of a CSE Term in Wikipedia

The screenshot shows the Wikipedia article for CUDA. A red box highlights the word "CUDA" in the title, with a red arrow pointing to it from the text "an acronym of a CSE term" written above. The article text explains that CUDA is a parallel computing platform and application programming interface (API) model created by Nvidia. It allows software developers and software engineers to use a CUDA-enabled graphics processing unit (GPU) for general purpose processing – an approach termed GPGPU. The CUDA platform is a software layer that gives direct access to the GPU's virtual instruction set and parallel computational elements, for the execution of compute kernels. The CUDA platform is designed to work with programming languages such as C, C++, and Fortran. This accessibility makes it easier for specialists in parallel programming to use GPU resources, in contrast to prior APIs like Direct3D and OpenGL, which required advanced skills in graphics programming. Also, CUDA supports programming frameworks such as OpenACC and OpenCL. When it was first introduced by Nvidia, the name CUDA was an acronym for Compute Unified Device Architecture, but Nvidia subsequently dropped the use of the acronym.

On the right side of the article, there is a sidebar with the title "CUDA" and the Nvidia logo. Below the logo, it states: "A parallel computing platform and programming model". It lists the following information:

- Developer(s): Nvidia Corporation
- Initial release: June 23, 2007; 9 years ago
- Stable release: 7.5 / September 8, 2015; 12 months ago
- Operating system: Windows XP and later, Mac OS X, Linux
- Platform: Supported GPUs
- Type: GPGPU
- License: Freeware
- Website: www.nvidia.com/object/cuda

The left sidebar of the Wikipedia page contains various navigation links such as "Main page", "Contents", "Featured content", "Current events", "Random article", "Donate to Wikipedia", "Wikipedia store", "Interaction", "Help", "About Wikipedia", "Community portal", "Recent changes", "Contact page", "Tools", "What links here", "Related changes", "Upload file", "Special pages", "Permanent link", "Page information", "Wikidata item", "Cite this page", "Print/export", "Create a book", "Download as PDF", and "Printable version".

**Supplement 6-12 A Screenshot of Google Search Results of the Word 'interact'**

**Which Appears Google Dictionary and Treasure.com as the Top Results**

**in·ter·act**  
/ˌɪn(t)ərˈækt/  
verb

act in such a way as to have an effect on another; act reciprocally.  
"all the stages in the process interact"

**synonyms provided by Google Dictionary**

**synonyms:** communicate, interface, connect, cooperate; meet, socialize, mix, be in contact, have dealings, work together

act in such a way as to have an effect on another; act reciprocally.  
"how the children interact is a primary focus of our observations"

Translations, word origin, and more definitions

**The top search result is the link to Thesaurus.com**

[Interact Synonyms, Interact Antonyms | Thesaurus.com](https://www.thesaurus.com/browse/interact)  
[www.thesaurus.com/browse/interact](https://www.thesaurus.com/browse/interact)

Synonyms for interact at Thesaurus.com with free online thesaurus, antonyms, and definitions. Dictionary and Word of the Day.

**Interaction**  
Synonyms for interaction at Thesaurus.com with free online ...

**Interacting**  
Synonyms for interacting at Thesaurus.com with free online ...

**Interacted Synonyms ...**  
Synonyms for interacted at Thesaurus.com with free online ...

**Interacts**  
Synonyms for interacts at Thesaurus.com with free online ...

[More results from thesaurus.com »](#)

**216 Interact Synonyms and 22 Interact Antonyms in Interact Thesaurus**  
<https://www.powerthesaurus.org/interact>

Power Thesaurus 1969, interact thesaurus, Power Thesaurus, viewed 24 September, 2016, <<http://www.powerthesaurus.org/interact/synonyms>>. MLA. Power Thesaurus. "interact thesaurus" 31 December 1969. Web.

**Supplement 6-13 A Screenshot of Synonyms of the Word ‘interact’ in**

**Theasaurus.com**

The screenshot shows the website Theasaurus.com with a search bar containing the word 'interact'. The page displays the word 'interact' as a verb meaning 'communicate'. Below this, there is an advertisement for 'INTERACT eCurriculum - Train Your Staff Online'. The main content area features a grid of synonyms for 'interact', including: collaborate, merge, contact, unite, interplay, combine, mesh, join, get across, interreact, connect, reach out, network, get the message, keep in touch, cooperate, relate, touch, interface, and touch base. Below the synonyms, there is a section for 'Antonyms for interact' which includes: disconnect, part, separate, not speak, and divide. At the bottom of the screenshot, there is a copyright notice: 'Roget's 21st Century Thesaurus, Third Edition Copyright © 2013 by the Philip Lief Group. Cite This Source'.

**More words related to interact**

**communicate**

verb. give or exchange information, ideas

- |             |             |               |           |            |
|-------------|-------------|---------------|-----------|------------|
| acquaint    | convey      | impart        | phone     | spread     |
| advertise   | correspond  | imply         | proclaim  | state      |
| advise      | declare     | inform        | publicize | suggest    |
| announce    | disclose    | interact      | publish   | tell       |
| be in touch | discover    | interface     | raise     | touch base |
| betray      | disseminate | keep in touch | reach out | transfer   |

Wu, Ya-Li | The Use of Technology during Academic Acculturation: Case Studies of Chinese-Speaking International Doctoral Students

break	divulge	let on	relate	transmit
broadcast	enlighten	let out	report	unfold
carry	get across	make known	reveal	write
connect	get through	network	ring up	
contact	hint	pass on	signify	

**contact**

verb. communicate with

approach	connect	interface	relate	visit
be in touch with	get	network	speak to	write to
buzz	get ahold of	phone	talk	
call	get in touch with	reach	telephone	
check with	interact	reach out	touch base	

**correlate**

verb. equate, compare

associate	coordinate	interact	tie in	
be on same wavelength	correspond	parallel	tune in on	
	have good vibes	relate mutually		

connect

**engage**

verb. interconnect; bring into operation

activate	energize	interlace	join	
apply	fasten	interlock	lock	
attach	get going	intermesh	mesh	
dovetail	interact	interplay	switch on	

**interchange**

verb. switch, exchange

alternate	connect	interface	relate	trade
bandy	contact	mesh	reverse	transpose
barter	convert	network	substitute	
commute	interact	reciprocate	swap	

**talk**

verb. discuss with another

Wu, Ya-Li | The Use of Technology during Academic Acculturation: Case Studies of Chinese-Speaking International Doctoral Students

argue	confer	go into a huddle	join in conversation	relate
be in contact	confide	groupthink	keep in touch	thrash out
canvass	consult	have a meet	negotiate	touch
carry on conversation	contact	hold discussion	network	touch base
chew	deliberate	huddle	palaver	vent
collogue	dialogue	interact	parley	visit
commune	engage in conversation	interface	reach out	
confabulate	exchange	interview	reason	

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[te This Source](#)

Supplement 6-14 A Screenshot of COCA Search for 'wireless' As an Example

The screenshot displays the COCA search interface for the word 'wireless'. The top navigation bar includes 'SEARCH', 'FREQUENCY', 'CONTEXT', and 'CONTEXT +'. The search results table shows the word 'WIRELESS' with a frequency of 550. Below the table, there is a section for 'SECTION: ACADEMIC (550)' and 'FIND SAMPLE: 100 200 500'. The search results table lists several entries, with the 159th entry highlighted in red. The source information section provides details about the article, including the date, publication information, title, author, and source. The expanded context section provides a detailed description of the article's content.

1			CONTEXT		FREQ
1			WIRELESS		550

SECTION: ACADEMIC (550)  
 FIND SAMPLE: 100 200 500  
 PAGE: << < 1 / 6 > >>

1	2015	ACAD	JAdolAdultLiteracy	A B C	a PC) with a limited Internet connection (they occasionally connected to a neighborhood wireless signal). The family PC was initially equipped with little soft
2	2015	ACAD	ResearchInMiddle	A B C	In the school, each student and teacher on the Engagers received laptops for 1:1 wireless computing. The team space was outfitted with media production t
3	2015	ACAD	LangSpeechHearing	A B C	DCR-DVD405; Sony Corporation of America, New York, NY) coupled with Bluetooth wireless microphones to make audio and video recordings. The microph
4	2015	ACAD	QuartRevDistanceEd	A B C	the era of breakout digital technology and smartphone apps (early 21st century) encompasses wireless, mobile, and, now, wearable computational devices;
5	2015	ACAD	TeachLibrar	A B C	:**25;47426;TOOLONG **44;47453;TOOLONG... # 1. It is essential to plan how bandwidth and wireless connectivity will impact educational technology. Pre
157	2011	ACAD	MechanicalEng	A B C	, and OMNEX industrially hardened Trusted Wireless FHSS radio technology for robust and secure two-way wireless communication. The R260 also featu
158	2011	ACAD	MechanicalEng	A B C	status to a remote monitoring center, or even trigger alerts to the individual via wireless means. # During protracted microgravity space flight missions, r
159	2011	ACAD	MechanicalEng	A B C	lightweight flying robots, each equipped with a module in the wing to emit a wireless signal and enable communication among rescuers in disaster areas
160	2011	ACAD	MechanicalEng	A B C	. # Researchers are actively pursuing ways to make smart phones part of tomorrow's wireless medical monitoring system. Researchers at Finland's Tamp
161	2011	ACAD	MechanicalEng	A B C	that patients would have to remove from their clothes before washing and drying. # WIRELESS MONITORS would trigger alerts automatically. # MONITO

**Source information:**

Date	2011
Publication information	Nov2011, Vol. 133 Issue 11, p30-35, 6p
Title	The World Is More Than Complicated.
Author	Noor, Ahmed K. 1 Lobeck, William E. 2 → The authors of the article
Source	ACAD: Mechanical Engineering → The title of the journal

**Expanded context:**

for controlling its buoyancy. The robot also has temperature and depth sensors, a hydrophone for recording subsea sounds, an inexpensive inertial navigation sensor, and a fiber optic encoder for measuring the shaft displacement of the linear actuator, used for controlling and adjusting buoyancy. A GPS unit and satellite communication module are used for communicating the robot's location, when it is at the surface. # Researchers at the Swiss Federal Institute of Technology in Lausanne have developed a swarm of small and lightweight flying robots, each equipped with a module in the wing to emit a wireless signal and enable communication among rescuers in disaster areas. Each robot can locate rescuers and establish a communication network with a base station. # A research team from the Free University of Brussels, funded by the European Commission, has been working on the development of humanoid robotic swarms in what it calls the Swarmanoid project. A group of heterogeneous, dynamically connected small autonomous robots capable of moving in 3-D space, the swarm can organize and distribute a given task into subtasks to be performed by different groups of

**Supplement 6-15 A screenshot of an English grammar search in**

**WordReference.com**

The screenshot shows a forum thread on WordReference.com. The thread title is "The Smiths Farm/The Smiths' Farm" and it was started by user ccm0416. The thread contains three posts:

- Post 1:** User ccm0416 asks, "If the Smith family owns a farm, will be it more natural to call the farm 'The Smiths Farm' or 'The Smiths' Farm'? At school, I learned that noun adjuncts shouldn't be plural so the latter with the apostrophe seems better to me but I'm not sure."
- Post 2:** User natkretap answers, "I think I would say *the Smith farm* or *the Smiths' farm*."
- Post 3:** User RM1(SS) answers, "I agree with nat. Not sure if I have a preference either way..."

Red arrows and text annotations highlight the following elements:

- An arrow points to the thread title with the text: "The use (CCm0416) asked the question which title is 'The Smiths Farm/ The Smiths' Farm'"
- An arrow points to the first post with the text: "The user (natkretap) answered the question."
- An arrow points to the second post with the text: "The user (RM1(SS)) answered the question too."

## Supplement - Technology Glossary

### Academic Search Engines

#### *Google search engine*

Google search engine which was developed by the Google company is one of web search engines that is used by online users to search online information. It indexes myriad of web pages and numerous electronic formats of files, such as PDF, Powerpoint, Word, and Excel formats, images, videos, animations, and so on. It also contains innumerable topics for online users to search. However, Google search engine does not index some hidden web pages which include library catalogs, telephone directories, official legislative governments' documents, and other hidden web pages. [source: Wikipedia - [https://en.wikipedia.org/wiki/Google\\_Search](https://en.wikipedia.org/wiki/Google_Search)]

#### *Google Scholar search engine*

Google Scholar search engine which was developed by the Google company indexes scholarly work in different types of electronic publications, such as journal articles, conference papers, books, abstracts, technical reports, and dissertations, across numerous academic disciplines. Researchers estimated that Google Scholar contains approximately 160 million scholarly documents (Orduña-Malea, Ayllón, Martín-Martín, & López-Cózar, 2014). However, researchers have also discovered the drawbacks of Google Scholar search engine which are inclined to comprise a great proportion of scholarly work published in English rather than in other languages and to exclusively include journal articles (Orduña-Malea et al., 2014). [source: Wikipedia - [https://en.wikipedia.org/wiki/Google\\_Scholar](https://en.wikipedia.org/wiki/Google_Scholar)]



The screenshot shows a Google Scholar search for the term "statistics". The search results are displayed in a list format. The first result is titled "Heart disease and stroke **statistics**--2006 update: a report from the American Heart Association **Statistics** Committee and Stroke **Statistics** Subcommittee." and is from "ahajournals.org". Below the title, the authors are listed as "T Thom, N Haase, W Rosamond, VJ Howard...". The publication information is "Circulation, 2006 - ncbi.nlm.nih.gov". The abstract begins with "Heart disease and stroke **statistics**--2006 update: a report from the American Heart Association **Statistics** Committee and Stroke **Statistics** Subcommittee. ... Thom T, Haase N, Rosamond W, Howard VJ, Rumsfeld J, Manolio T, Zheng ZJ, Flegal K, O'Donnell C, Kittner S, Lloyd-Jones". Below the abstract, there are several links: "Cited by 3120", "Related articles", "All 4 versions", "Web of Science: 1464", "Cite", and "Save". A red box highlights the "Cited by 3120" link, and another red box highlights the "Cite" link. A red arrow points from the "Cited by 3120" link to the text "Citation counts" which is written in red. The second result is titled "[CITATION] Plan and operation of the third National Health and Nutrition Examination Survey, 1988-94" and is from "National Center for Health **Statistics** (US) - 1994 - Natl Ctr for Health **Statistics**". Below the title, the authors are listed as "AS Go, D Mozaffarian, VL Roger, EJ Benjamin...". The publication information is "Circulation, 2013 - Am Heart Assoc". The abstract begins with "Summary Each year, the American Heart Association (AHA), in conjunction with the Centers for Disease Control and Prevention, the National Institutes of Health, and other government agencies, brings together the most up-to-date **statistics** on heart disease, stroke, other". Below the abstract, there are several links: "Cited by 2071", "Related articles", "Cite", "Save", and "More". The third result is titled "AHA statistical update" and is from "academia.edu". Below the title, the authors are listed as "AS Go, D Mozaffarian, VL Roger, EJ Benjamin...". The publication information is "Circulation, 2013 - Am Heart Assoc". The abstract begins with "Summary Each year, the American Heart Association (AHA), in conjunction with the Centers for Disease Control and Prevention, the National Institutes of Health, and other government agencies, brings together the most up-to-date **statistics** on heart disease, stroke, other". Below the abstract, there are several links: "Cited by 11083", "Related articles", "All 12 versions", "Cite", "Save", and "More". On the left side of the search results, there are several filters: "Articles", "Case law", "My library", "Any time", "Since 2017", "Since 2016", "Since 2013", "Custom range...", "Sort by relevance", "Sort by date", "include patents", and "include citations".

About 5,610,000 results (0.04 sec)

**Heart disease and stroke statistics--2006 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee.**  
Thom, T, Haase, N, Rosamond, W, Howard, V J, Rumsfeld, J, Manolio, T, ... & Lloyd-Jones, D. (2006). Heart disease and stroke statistics--2006 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation*, 113(6), e85.  
Cited by 3120 Related articles All 4 versions

[CITATION] **Plan and operation of the t... Survey, 1988-94**  
National Center for Health **Statistics** (US) - 1  
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**AHA statistical update**  
AS Go, D Mozaffarian, VL Roger, EJ Benjamin  
Summary Each year, the American Heart Ass... for Disease Control and Prevention, the Natic... agencies, brings together the most up-to-date...  
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[BOOK] **Vital statistics of the United**

**Cite**

Copy and paste a formatted citation or use one of the links to import into a bibliography manager.

MLA Thom, Thomas, et al. "Heart disease and stroke statistics--2006 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee." *Circulation* 113.6 (2006): e85.

APA Thom, T., Haase, N., Rosamond, W., Howard, V. J., Rumsfeld, J., Manolio, T., ... & Lloyd-Jones, D. (2006). Heart disease and stroke statistics--2006 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation*, 113(6), e85.

Chicago Thom, Thomas, Nancy Haase, Wayne Rosamond, Virginia J. Howard, John Rumsfeld, Teri Manolio, Zhi-Jie Zheng et al. "Heart disease and stroke statistics--2006 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee." *Circulation* 113, no. 6 (2006): e85.

Harvard Thom, T., Haase, N., Rosamond, W., Howard, V.J., Rumsfeld, J., Manolio, T., Zheng, Z.J., Flegal, K., O'Donnell, C., Kittner, S. and Lloyd-Jones, D., 2006. Heart disease and stroke statistics--2006 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation*, 113(6) n e85

Vancouver Thom T, Haase N, ZJ, Flegal K, O'Dor... statistics--2006 up... Statistics Committe... Feb 14;113(6):e85.

**Users of Google Scholar can import citation information into their EndNote accounts via clicking "Cite" and then clicking "EndNote".**

BibTeX **EndNote** RefMan RefWorks

*Google Books search engine*

Google Books search engine which was developed by the Google company contains partial content of electronic books and magazines that are provided by publishers, authors, or partners with the Google company. [source: Wikipedia - [https://en.wikipedia.org/wiki/Google\\_Books](https://en.wikipedia.org/wiki/Google_Books)]



*Web of Science*

Web of Science search engine is similar to Google Scholar search engine but was developed by Thomson Reuters company. Its databases cover abstracts, scholarly journal articles, conference proceedings, books, across various academic disciplines, including the sciences, humanities, arts, social sciences disciplines, from 1900 to the present. Before 2008, it only included scholarly work published in English. Since 2008, it has extended its databases to incorporate scholarly work published in different languages. These extended databases comprise the Chinese Science Citation Database (in 2008), the SciELO Citation Index (in 2013) containing South Africa, Caribbean, Brazil, Spain, Portugal, and other twelve countries of Latin American, the Korea Citation Index (in 2014), and the Russian Science Citation index (in 2015). [source: Wikipedia - [https://en.wikipedia.org/wiki/Web\\_of\\_Science](https://en.wikipedia.org/wiki/Web_of_Science)]

**WEB OF SCIENCE™** THOMSON REUTERS™

Search My Tools Search History Marked List

**Results: 125,704**  
(from Web of Science Core Collection)

You searched for: TOPIC:  
(material science) ...More

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Page 1 of 10,000

Save to EndNote online Add to Marked List

Analyze Results  
Citation Report feature not available. [?]

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Search within results for...

**Web of Science Categories**

- MATERIALS SCIENCE MULTIDISCIPLINARY (29,673)
- CHEMISTRY PHYSICAL (11,900)
- PHYSICS APPLIED (11,794)
- PHYSICS CONDENSED MATTER (10,310)
- METALLURGY METALLURGICAL ENGINEERING (6,282)

1. **High temperature ultralow water content carbon dioxide-in-water foam stabilized with viscoelastic zwitterionic surfactants**  
By: Alzobaidi, Shehab; Da, Chang; Vu Tran; et al.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE Volume: 488 Pages: 79-91 Published: FEB 15 2017  
Find It! View Abstract

2. **Cobalt(II) complexation with small biomolecules as studied by Co-57 emission Mossbauer spectroscopy**  
By: Kamnev, Alexander A.; Perfiliev, Yurii D.; Kulikov, Leonid A.; et al.  
Conference: 39th Colloquium on Spectroscopicum Internationale (CSI) Location: New Univ Lisbon, Figueira da Foz, PORTUGAL Date: AUG 30-SEP 03, 2015  
Sponsor(s): Univ Coimbra  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY Volume: 172 Special Issue: SI Pages: 77-82 Published: FEB 5 2017  
Find It! View Abstract

3. **Studying two-dimensional zeolites with the tools of surface science: MFI nanosheets on Au(111)**  
By: Kestell, John D.; Zhong, Jian-Qiang; Shete, Meera; et al.

Times Cited: 0 (from Web of Science Core Collection)  
Usage Count

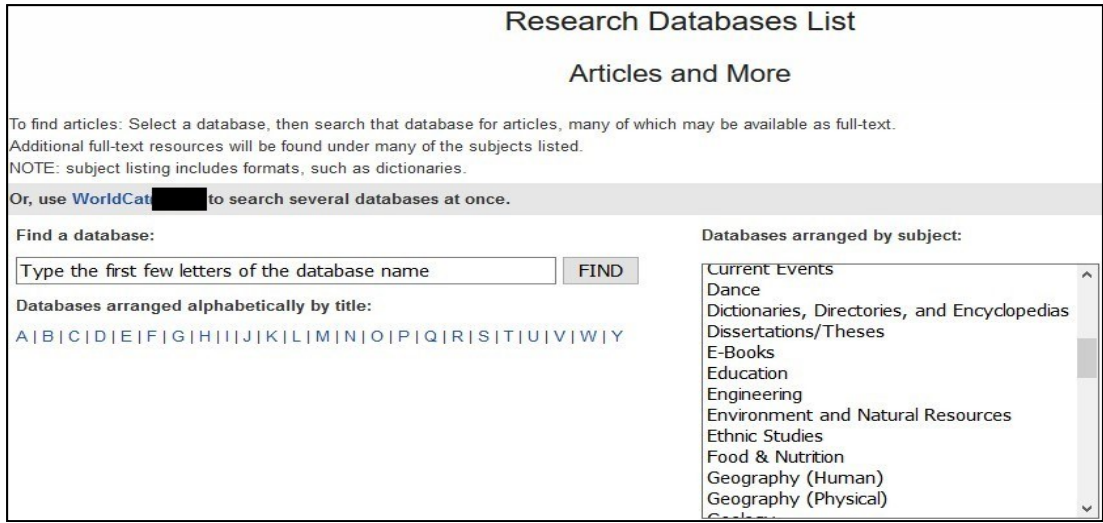
Times Cited: 0 (from Web of Science Core Collection)  
Usage Count

Times Cited: 0 (from Web of Science Core Collection)

*The participants' school library search engine*

The participants' school library search engine is able to search for academic journal articles across different academic disciplines, books, magazines, multimedia files, and so on. In addition to these online resources, the school library also provides research databases which comprise various disciplinary research databases, including theses and dissertations.





### Digital Bibliographic Library Browser (Dblp)

Dblp academic search engine is an online computer science bibliography browser and contains around 1,500 journals, around 5,000 conference papers, workshop proceedings, monographs, and other publications on computer science. Tian-You employs the dblp search engine to look for academic papers of scholars whom his advisor or other researchers in his advisor’s research team mentioned and whom he did not know before they mentioned. The search engine will present a list of a scholar’s conference papers, workshop papers, and journal articles via typing the scholar’s name in the search bar as shown in the following image 1. Tian-You often uses dblp through this method. However, dblp does not offer information of citation counts and PDF of scholars’ papers. It provides links to additional websites, such as Google Scholar, to obtain those information (see image 2).

[sources: Wikipedia - <https://en.wikipedia.org/wiki/DBLP>; <http://dblp.uni-trier.de/> ]

Image 1

The screenshot shows the dblp (computer science bibliography) website. At the top left is the dblp logo. A search bar contains the text "search dblp". The main header displays the name "Joanna Daaboul" in a dark grey bar, which is highlighted with a red box. Below this, the navigation path is "> Home > Persons". A filter dropdown is set to "2010 - today". The main content area lists papers from 2016 to 2014. The first two papers from 2016 are highlighted with a red box. Red arrows point from the text "The scholar's name is Joanna Daaboul." to the name in the header, and "The list of Joanna Daaboul's papers" to the highlighted list of papers.

home | browse | search | about

dblp  
computer science bibliography

The scholar's name is Joanna Daaboul.

search dblp

[+] [-] Joanna Daaboul

> Home > Persons

The list of Joanna Daaboul's papers

[+] [-] 2010 - today

[-] Refine list

showing all 9 records

refine by search term

refine by type  
temporarily not available

refine by coauthor  
temporarily not available

refine by venue  
temporarily not available

2016

[5] Diana Penciu, Julien Le Duigou, Joanna Daaboul, Flore Vallet, Benoît Eynard:  
**Product life cycle management approach for integration of engineering design and life cycle engineering.** AI EDAM 30(4): 379-389 (2016)

[4] The Anh Tuan Dang, Magali Bosch-Mauchand, Neha Arora, Christine Prella, Joanna Daaboul:  
**Electromagnetic modular Smart Surface architecture and control in a microfactory context.** Computers in Industry 81: 152-170 (2016)

2015

[3] Joanna Daaboul, Catherine Da Cunha, Julien Le Duigou, Bostjan Novak, Alain Bernard:  
**Differentiation and customer decoupling points: An integrated design approach for mass customization.** Concurrent Engineering: R&A 23(4): 284-295 (2015)

[4] Fabien Mahut, Matthieu Bricogne, Joanna Daaboul, Benoît Eynard:  
**Servicization of Product Lifecycle Management: Towards Service Lifecycle Management.** PLM 2015: 321-331

2014

Image 2



[ - ] 2010 - today ⓘ

---

**2016**

■ [j5] [document icon] [download icon] [share icon] Diana Penciu, Julien Le Duigou, Joanna Daaboul, Flore Vallet, Ben  
**cycle management approach for integration of er**  
; AI EDAM 30(4): 379-389 (2016)

■ [j4] [document icon] [ask others icon] [Google icon] [Google Scholar icon] [MS Academic Search icon] [CiteSeerX icon] [Semantic Scholar icon] n Dang, Magali Bosch-Mauchand, Neha Arora, Christi  
**netic modular Smart Surface architecture and con**  
n Industry 81: 152-170 (2016)

**2015**

■ [j3] [document icon] [download icon] [share icon] Joanna Daaboul, Catherine Da Cunha, Julien Le Duigou, Bostjan Ne  
**Differentiation and customer decoupling points: An integrate**  
**customization.** Concurrent Engineering: R&A 23(4): 284-295 (2015)

### IEEE Xplore

IEEE Xplore is a research database mainly covering materials from Institution of Engineering and Technology and Institute of Electrical and Electronics Engineers (IEEE). The materials include more than 180 journals, more than 1,400 conference proceedings, more than 3,800 technical standards, more than 1,800 eBooks, and more than 400 educational courses related to computer science and electronics and electrical engineering. The request could be a scholar's name or a title of an academic paper. [sources: Wikipedia - [https://en.wikipedia.org/wiki/IEEE\\_Xplore](https://en.wikipedia.org/wiki/IEEE_Xplore); <http://ieeexplore.ieee.org/Xplore/home.jsp>]

The screenshot shows the IEEE Xplore search interface. At the top, a search bar contains the term 'supercomputer' and a 'Search' button. Below the search bar are tabs for 'Basic Search', 'Author Search', and 'Publication Search', along with links for 'Advanced Search' and 'Other Search Options'. The main area displays 'Displaying results 1-25 of 4,715 for supercomputer'. Below this, there are controls for 'Show' (set to 'All Results'), 'Per Page' (set to '25'), and 'Sort By' (set to 'Relevance'). A row of utility links includes 'Select All on Page', 'Download Citations', 'Export to IEEE Collabratec', 'Set Search Alerts', and 'Search History'. On the left, a 'Refine results by' sidebar is visible, with a search box and filters for 'Content Type' (Conference Publications, Journals & Magazines, Books & eBooks, Early Access Articles, Courses) and 'Year'. The main results list shows two entries: 1) 'MR-Advisor: A Comprehensive Tuning Tool for Advising HPC Users to Accelerate MapReduce Applications on Supercomputers' by Md. Wasi-Ur-Rahman et al., published in 2016 at the SBAC-PAD conference. 2) 'An information-theoretic approach to performance evaluation of supercomputers' by Rakitskiy Anton et al., published in 2016 at the REDUNDANCY symposium. Each result includes a checkbox, a title, authors, conference name, year, and options for abstract, HTML, PDF, and copyright.

Association for Computing Machinery (ACM) Digital Library search engine

ACM Digital Library is a research database covering ACM's publications which include conference proceedings, journals, magazines, newsletters, and multimedia related to computing and information technology.

[source: <http://librarians.acm.org/digital-library>]

Searched for **supercomputer** [new search] [edit/save query] [advanced search]

Searched The ACM Full-Text Collection: 457,546 records [Expand your search to The ACM Guide to Computing Literature: 2,618,937 records] ?

**5,169** results found **the partial results of the searched keyword - supercomputer** Export Results: bibtex | endnote | acmref | csv

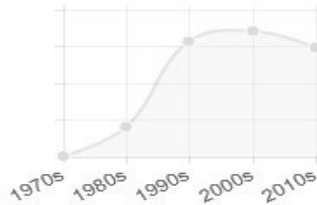
Result 1 – 20 of 5,169 Result page: 1 2 3 4 5 6 7 8 9 10 >> Sort by: relevance

**Refine by People**  
Names ▶  
Institutions ▶  
Authors ▶  
Editors ▶  
Reviewers ▶

**Refine by Publications**  
Publication Names ▶  
ACM Publications ▶  
All Publications ▶  
Content Formats ▶  
Publishers ▶

**Refine by Conferences**  
Sponsors ▶  
Events ▶  
Proceeding Series ▶

**Refine by Publication Year**



**1** [Does your workstation computation belong on a vector supercomputer?](#)  
[Clark D. Thomborson](#)  
October 1993 Communications of the ACM: Volume 36 Issue 11, Nov. 1993  
**Publisher:** ACM  
**Bibliometrics:** Citation Count: 1  
Downloads (6 Weeks): 2, Downloads (12 Months): 11, Downloads (Overall): 285  
Full text available: [PDF](#)  
**Keywords:** vector supercomputer  
[\[result highlights\]](#)

**2** [DEEP: an exascale prototype architecture based on a flexible configuration](#)  
[Arndt Bode](#)  
May 2012 CF '12: Proceedings of the 9th conference on Computing Frontiers  
**Publisher:** ACM  
**Bibliometrics:** Citation Count: 0  
Downloads (6 Weeks): 5, Downloads (12 Months): 9, Downloads (Overall): 76  
Full text available: [PDF](#)  
DEEP is a multipartner international cooperation project supported by the EU FP7 that introduces a flexible global system architecture using general purpose and manycore processor architectures (based on IntelMIC: many integrated core architecture). With XTOLL, DEEP uses a very powerful interconnection structure, which allows for the arrangement of different application ...  
**Keywords:** manycore, supercomputing  
[\[result highlights\]](#)





*AMiner search engine*

AMiner provides search and mining services for computer science researchers. It covers around 6,000 conferences, around 3 million publications, 7 million researcher profiles across 200 countries in computer science. Users of AMiner could search for a scholar's profile which contains the scholar's contact information, research interest, educational history, citation statistics, academic achievement evaluation, publication records, research funding, and so on. Moreover, users could look for information of who are experts in some sub-fields in computer science via typing a keyword of the sub-field (e.g., supercomputer). In addition, users could search for the information of conference ranking, researcher ranking, and academic paper ranking.

[source: <https://aminer.org/>]



### Academic Rankings

 <b>Researcher Rank</b> Rank researchers by <i>h</i> -index, A-index, G-index, Citation number, Paper number, Diversity, and Rising Star.	 <b>Organization Rank</b> Rank organizations by Paper number, First author number, Credit, Citation number, Weighted Credit, A-index, AM-score.	 <b>Conference Rank</b> Rank conferences in Computer Science domain by Impact Factor.	 <b>Best Papers vs Top Cited Papers</b> Present best papers and top cited papers in Computer Science domain.
---	---	---	--

## Citation Software

### *EndNote*

EndNote is commercial reference management software. Users could employ it to organize academic papers that they read. Moreover, users could import citation information and PDF of scholarly papers from some academic search engines (e.g., Web of Science and Google Scholar) into users' EndNote online accounts or into their EndNote software installed in their computers. Users could select a needed citation style (e.g., APA, MLA, or other citation styles) in their EndNote and generate in-text citations and bibliographies while writing academic papers. It provides numerous citation styles for users to choose (see image 2).

Image 1

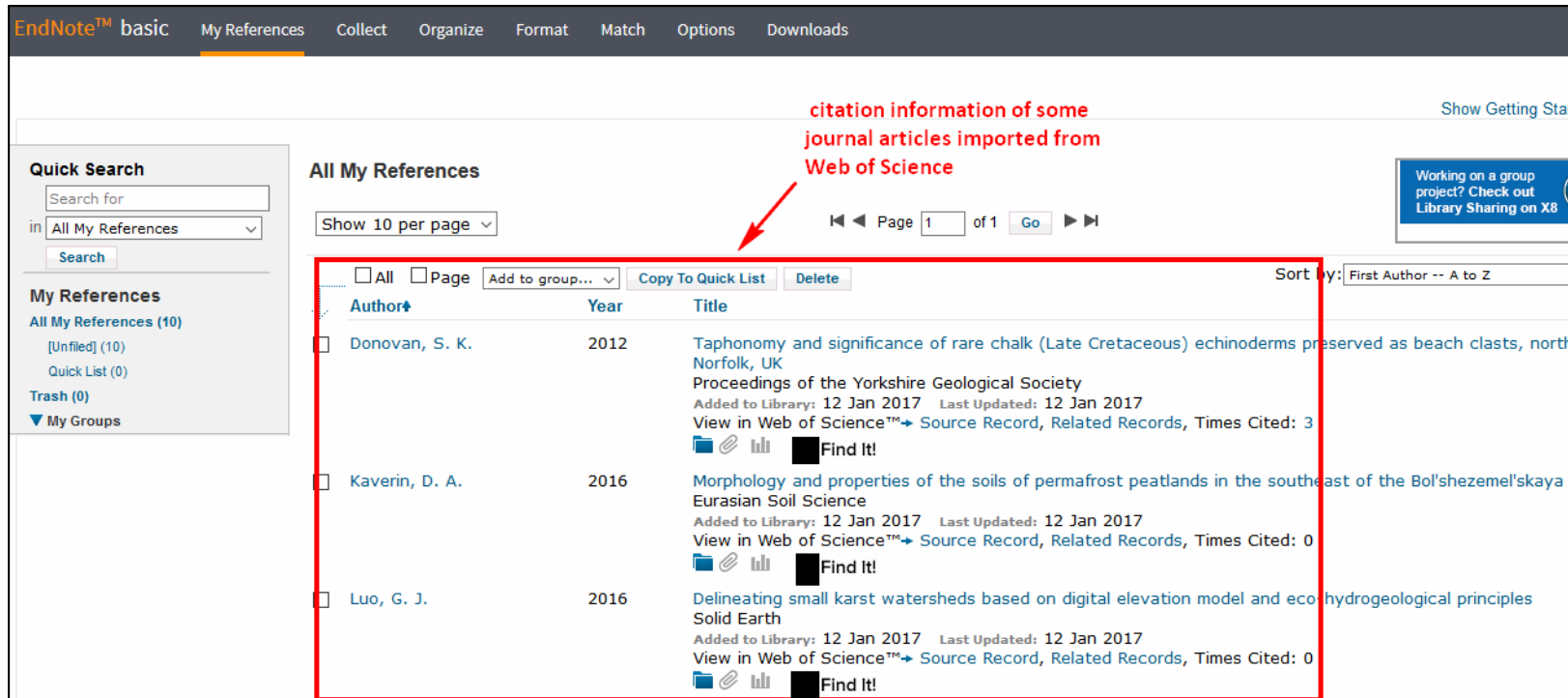
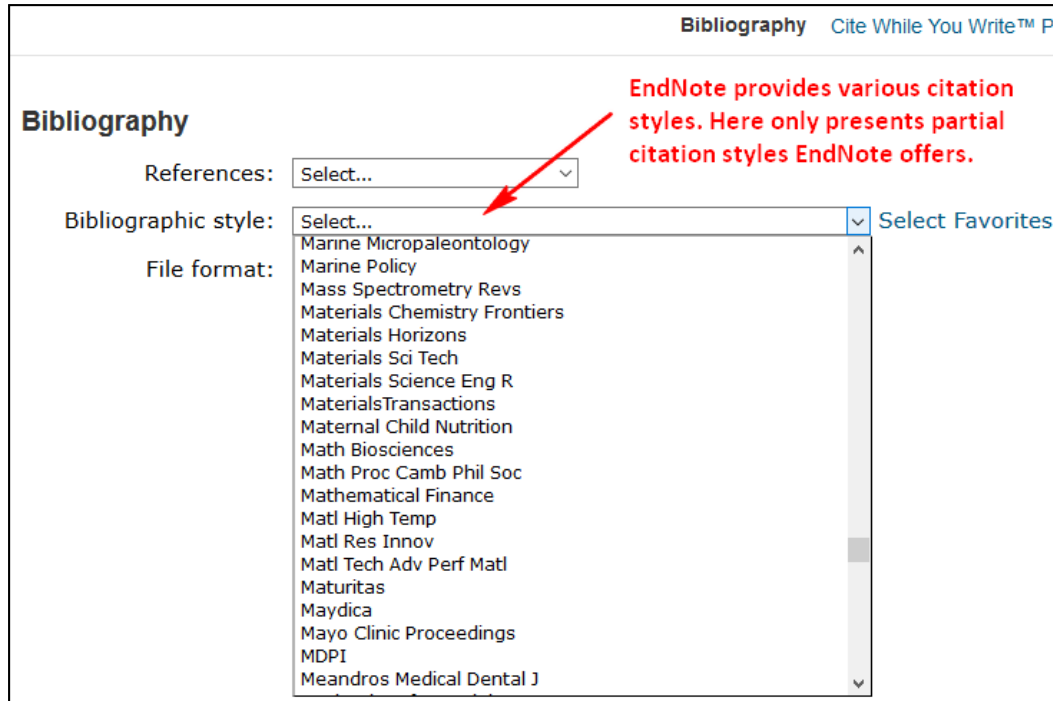


Image 2



### RefWorks

RefWorks is online commercial reference management software. As EndNote, users could utilize it to organize academic papers that they read and import citation information from some academic search engines into their online RefWorks accounts. In addition, users could choose a needed citation style and generate in-text citations and bibliographies while writing academic papers. Nevertheless, RefWorks does not provide too many citation styles, especially citation styles for different academic conferences and journals in science and engineering fields (see image 2).

Image 1

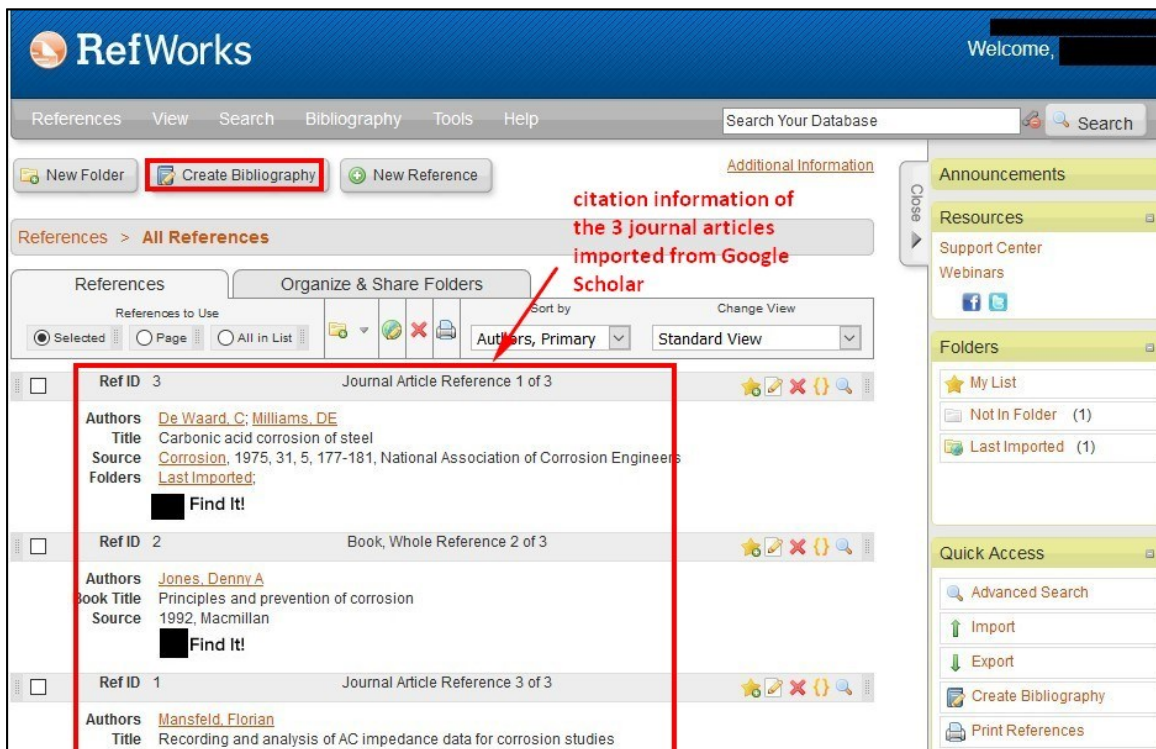
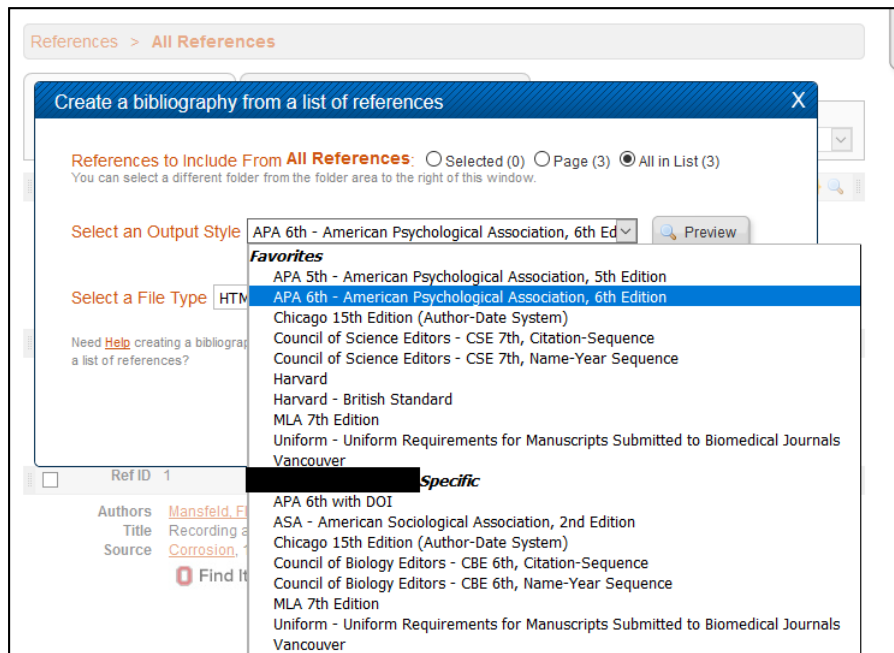




Image 2



### Mendeley

Mendeley is free reference management software like EndNote and RefWorks. Users could use it to organize academic papers they search for and read through importing their citation information into their Mendeley accounts. Furthermore, users could select a needed citation style and generate in-text citations and bibliographies while writing academic papers. Mendeley supports around 6,900 citation styles.

[source: <https://www.mendeley.com/> ]

Image 1

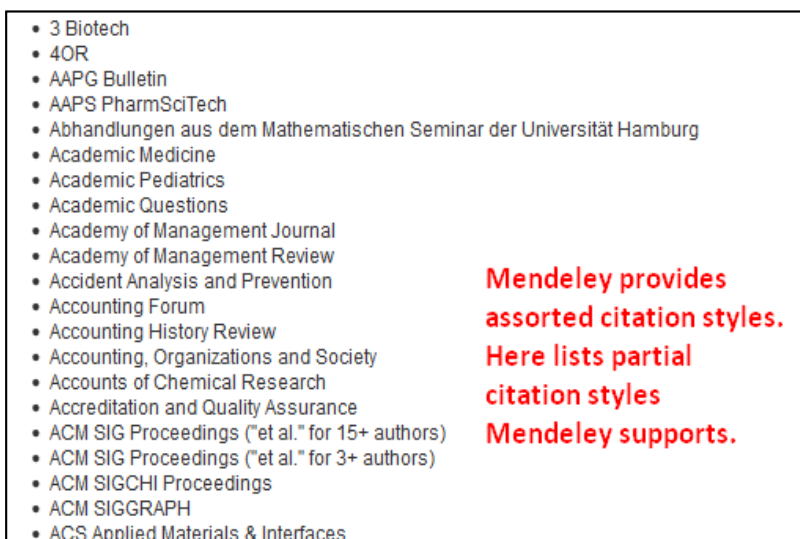
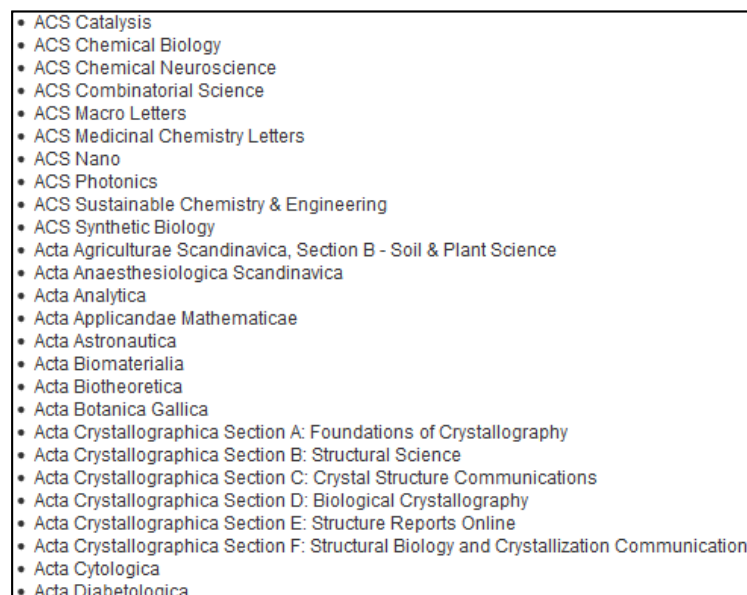


Image 2



### *BibDesk*

Like EndNote, RefWorks, and Mendeley, BibDesk is reference management software. The big difference of BibDesk and other citation software is that BibDesk is especially used in Mac computers with Mac OS X system. It is often utilized with BibTeX and LaTeX. Users could employ BibDesk to import citation information of academic articles (in the BibTeX format) they read online into their BibDesk installed in users' computers. Meanwhile, it is also utilized to organize users' readings. Another big difference of BibDesk and other citation software is that it does not contain citation styles that users could randomly choose like in EndNote, RefWorks, or Mendeley. If users want to create a bibliography with the APA style, they need to import citation information in the BibTeX format with the APA style into their BibDesk when browsing academic articles on an academic search engine (e.g., Google Scholar). When they compose an academic paper in the LaTeX environment, they could export a bibliography with the APA style from their BibDesk and then integrate it into their LaTeX documents.

[Sources: <https://en.wikipedia.org/wiki/BibDesk> ; <http://bibdesk.sourceforge.net/>]

### Online Lexical Resources

Taiwan Yahoo online Chinese-English dictionary

It is a web-based Chinese-English dictionary. It provides Chinese translations of a searched English word or phrase (e.g., important – adj. 重要的；重大的). It also offers American and/or British pronunciation, related phrases (e.g., self-important and all-important), parts of speech (e.g., adjective), synonyms, antonyms, sentence examples of a searched English word or phrase, and their Chinese translations (see the image below). [source: <https://tw.dictionary.yahoo.com/>]

The screenshot shows the dictionary entry for 'important'. At the top, the search bar contains 'important' and the search button '搜尋'. The main entry for 'important' includes its pronunciation in KK and DJ systems, and its Chinese translation '重要的，重大的[ (+to/for) ]'. Below this, there are sections for 'synonyms' (chief, principal, leading, major), 'antonyms' (unimportant, trivial, minor, insignificant), and 'word forms' (more important, most important). A 'related phrases' section lists 'most important', 'more important', 'self-important', and 'all-important'. The '釋義' (Meaning) section is expanded to show three numbered examples. Example 1 is 'It is important to see that everything goes well. 重要的是確保一切順利。', which is highlighted with a red box and a red arrow pointing to it from a red text annotation. Example 2 is 'It is important to learn to communicate. 學會溝通思想很重要。'. Example 3 is 'He has an important air about him. 他顯得盛氣凌人。'. The right sidebar contains navigation options like '熱門關', '翻譯', '短期遊', '最近查', and '工具推'.

Dr. Eye

It is a Chinese-English dictionary which is very popular in Taiwan. It has a web-based format and a desktop format. It offers explanations and translations in Chinese of a search word or phrase (e.g., support), pronunciation, sentence examples, word forms (e.g., supported (the past tense), supported (the past participle), supporting (gerund)), phrases, synonyms, antonyms, parts of speech (e.g., verb and noun), and other features.

Image 1



Image 2



Image 3



*Dictionary.com*

It is a web-based English dictionary which sources include the Random House Unabridged Dictionary, American Heritage, and Harper Collins. It provides a searched word's pronunciation, English definitions, parts of speech, example sentences, and word origin. [source: <http://www.dictionary.com/>]

# support

[*suh-pawrt, -pohrt*]

Spell  Syllables

[Synonyms](#) [Examples](#) [Word Origin](#)

[See more synonyms on Thesaurus.com](#)

**verb (used with object)**

1. to bear or hold up (a load, mass, structure, part, etc.); serve as a foundation for.
2. to sustain or withstand (weight, pressure, strain, etc.) without giving way; serve as a prop for.
3. to undergo or endure, especially with patience or submission; tolerate.
4. to sustain (a person, the mind, spirits, courage, etc.) under trial or affliction:  
*They supported him throughout his ordeal.*
5. to maintain (a person, family, establishment, institution, etc.) by supplying with things necessary to existence; provide for:  
*to support a family.*

*Thesaurus.com*

It is developed by Dictionary.com company and a web-based English thesaurus dictionary. It primarily provides various synonyms but also offers a few antonyms for a searched English word (e.g., interact in the following images). [source: <http://www.thesaurus.com/>]

Image 1

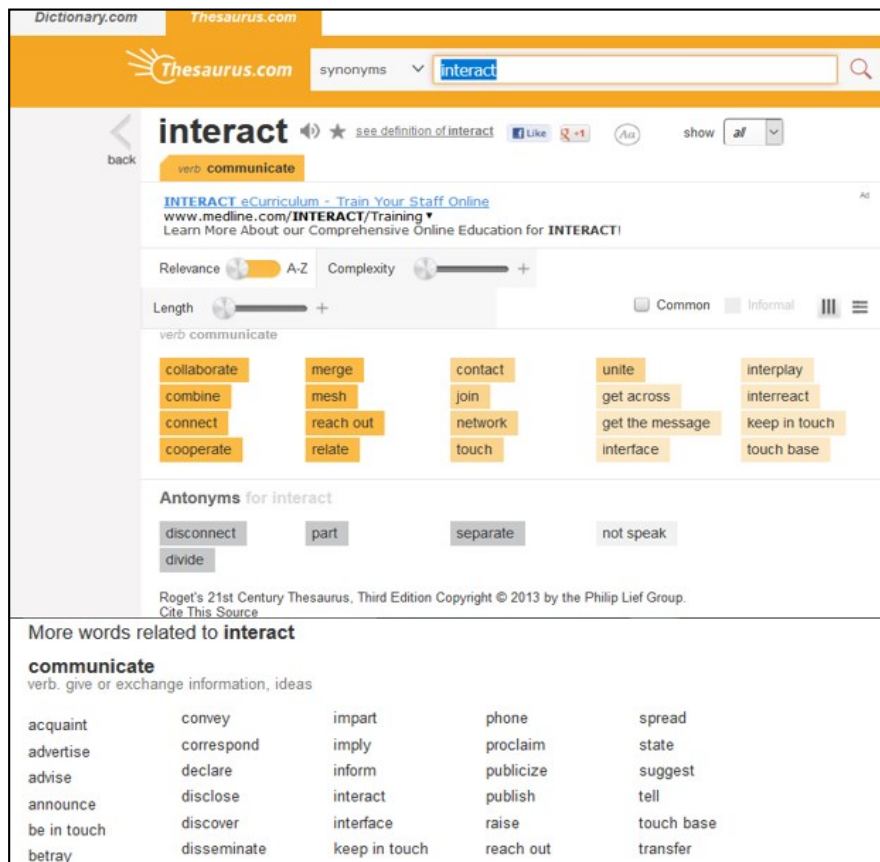
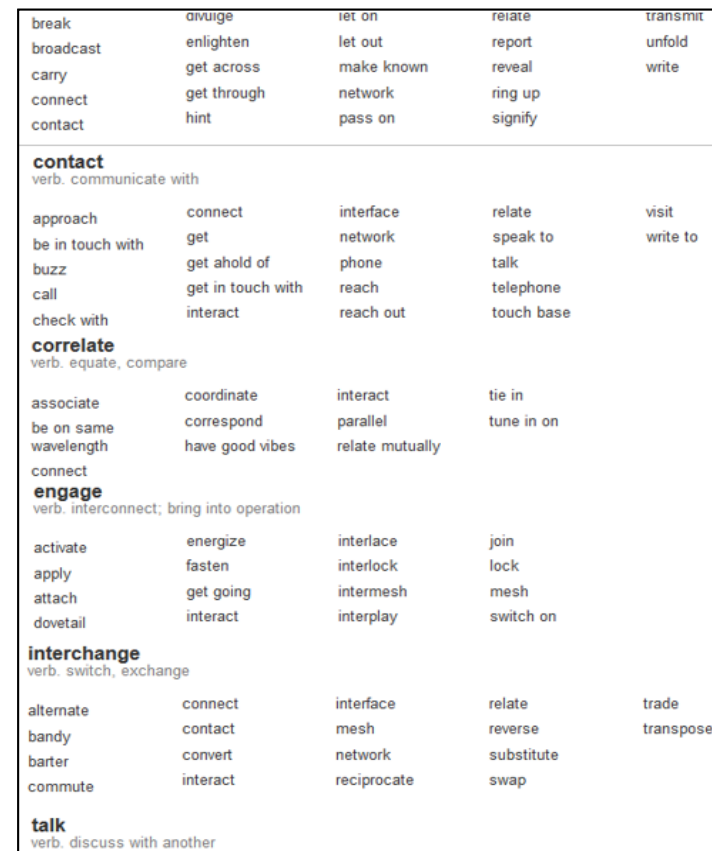


Image 2

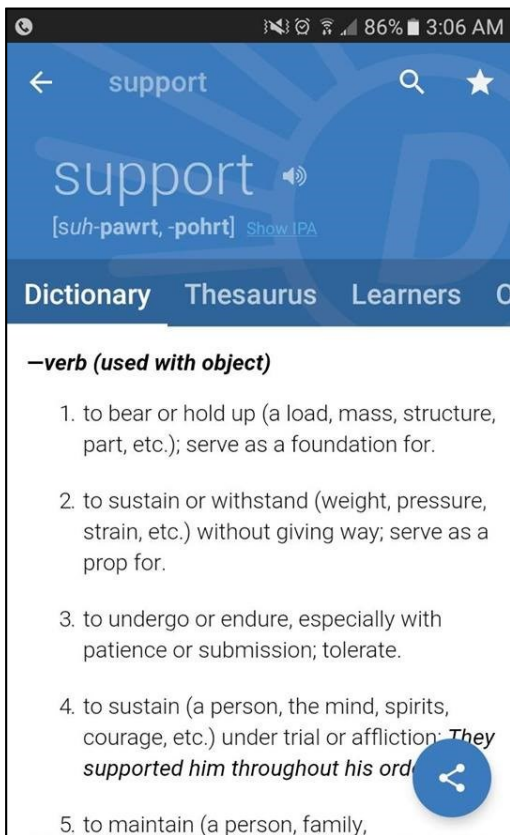


Dictionary App

It is developed by Dictionary.com company and is an App installed in a cell phone. In the cell phone environment, Dictionary app offers a searched word’s pronunciation, English definitions, parts of speech, related forms (e.g., adverb and adjective), word origin, and synonyms. The sentence examples are shown in the tab of “Learners” (see image 2).

Image 1

Image 2





*Corpus of Contemporary American English (COCA)*

COCA is an English corpus mainly focusing on American English and only including American texts. On their website (<http://corpus.byu.edu/coca/>), it said that “The Corpus of Contemporary American English (COCA) is the largest freely-available corpus of English, and the only large and balanced corpus of American English”. This corpus contains five major databases of different writing genres: a) spoken, b) fiction, c) popular magazines, d) newspapers, and e) academic journals. The website further stated that the newspapers database includes USA Today and New York Times; the popular magazines database contains Time and Fortune; the academic journals database has Journal of Instructional Psychology and Studies in Latin American Popular Culture. After users type a searched word, COCA will generate thousands of fragmental sentence examples of the search word excerpting from databases in COCA. The following image shows an example of the searched word “wireless” in the academic text database in COCA. The frequency of using this word “wireless” in the academic text database is 550 times. The number of 159 academic article in the database is from the Mechanical Engineering journal. The article was published in 2011 and written by Ahmed Noor and William Lobeck. They used “wireless” this word in the sentence of “Researchers at the Swiss Federal Institute of Technology in Lausanne have developed a swarm of small and lightweight flying robots, each equipped with a module in the wing to emit a wireless signal and enable communication among rescuers in disaster areas.”

**new Corpus of Contemporary American English**

SEARCH FREQUENCY CONTEXT CONTEXT +

SEE CONTEXT: CLICK ON WORD OR SELECT WORDS + [CONTEXT] [HELP...]

CONTEXT 550

1 WIRELESS 550

SECTION: ACADEMIC (550)  
 FIND SAMPLE: 100 200 500  
 PAGE: << < 1 / 6 > >>

CLICK FOR MORE CONTEXT [?] SAVE LIST CHOOSE LIST CREATE NEW LIST [?]

1	2015	ACAD	JAdolAdultLiteracy	A B C	a PC) with a limited Internet connection (they occasionally connected to a neighborhood wireless signal). The family PC was initially equipped with little soft
2	2015	ACAD	ResearchInMiddle	A B C	in the school, each student and teacher on the Engagers received laptops for 1:1 wireless computing. The team space was outfitted with media production t
3	2015	ACAD	LangSpeechHearing	A B C	DCR-DVD405; Sony Corporation of America, New York, NY) coupled with Bluetooth wireless microphones to make audio and video recordings. The microph
4	2015	ACAD	QuartRevDistanceEd	A B C	the era of breakout digital technology and smartphone apps (early 21st century) encompasses wireless, mobile, and, now, wearable computational devices;
5	2015	ACAD	TeachLibrar	A B C	:**25;47426;TOOLONG**44;47453;TOOLONG... # 1. It is essential to plan how bandwidth and wireless connectivity will impact educational technology. Pre
157	2011	ACAD	MechanicalEng	A B C	, and OMNEX industrially hardened Trusted Wireless FHSS radio technology for robust and secure two-way wireless communication. The R260 also featu
158	2011	ACAD	MechanicalEng	A B C	status to a remote monitoring center, or even trigger alerts to the individual via wireless means. # During protracted microgravity space flight missions, r
159	2011	ACAD	MechanicalEng	A B C	lightweight flying robots, each equipped with a module in the wing to emit a wireless signal and enable communication among rescuers in disaster areas
160	2011	ACAD	MechanicalEng	A B C	. # Researchers are actively pursuing ways to make smart phones part of tomorrow's wireless medical monitoring system. Researchers at Finland's Tamp
161	2011	ACAD	MechanicalEng	A B C	that patients would have to remove from their clothes before washing and drying. # WIRELESS MONITORS would trigger alerts automatically. # MONITO

**Source information:**

Date	2011
Publication information	Nov2011, Vol. 133 Issue 11, p30-35, 6p
Title	The World Is More Than Complicated.
Author	Noor, Ahmed K. 1 Lobeck, William E. 2 → The authors of the article
Source	ACAD: Mechanical Engineering → The title of the journal

**Expanded context:**

for controlling its buoyancy. The robot also has temperature and depth sensors, a hydrophone for recording subsea sounds, an inexpensive inertial navigation sensor, and a fiber optic encoder for measuring the shaft displacement of the linear actuator, used for controlling and adjusting buoyancy. A GPS unit and satellite communication module are used for communicating the robot's location, when it is at the surface. # Researchers at the Swiss Federal Institute of Technology in Lausanne have developed a swarm of small and lightweight flying robots, each equipped with a module in the wing to emit a wireless signal and enable communication among rescuers in disaster areas. Each robot can locate rescuers and establish a communication network with a base station. # A research team from the Free University of Brussels, funded by the European Commission, has been working on the development of humanoid robotic swarms in what it calls the Swarmanoid project. A group of heterogeneous, dynamically connected small autonomous robots capable of moving in 3-D space, the swarm can organize and distribute a given task into subtasks to be performed by different groups of

### Google Dictionary

It was developed by Google company. It is integrated with the Google search engine so when users want to search for an English word (e.g., support), they directly type this word “support” followed by “define” in the Google search bar. Then, the Google dictionary will generate information of the word “support”, including its pronunciation, parts of speech, English definitions, sentence examples, a few synonyms, a few antonyms, translations in different languages, word origin, statistics of the word that was used in Google Books databases.

Image 1

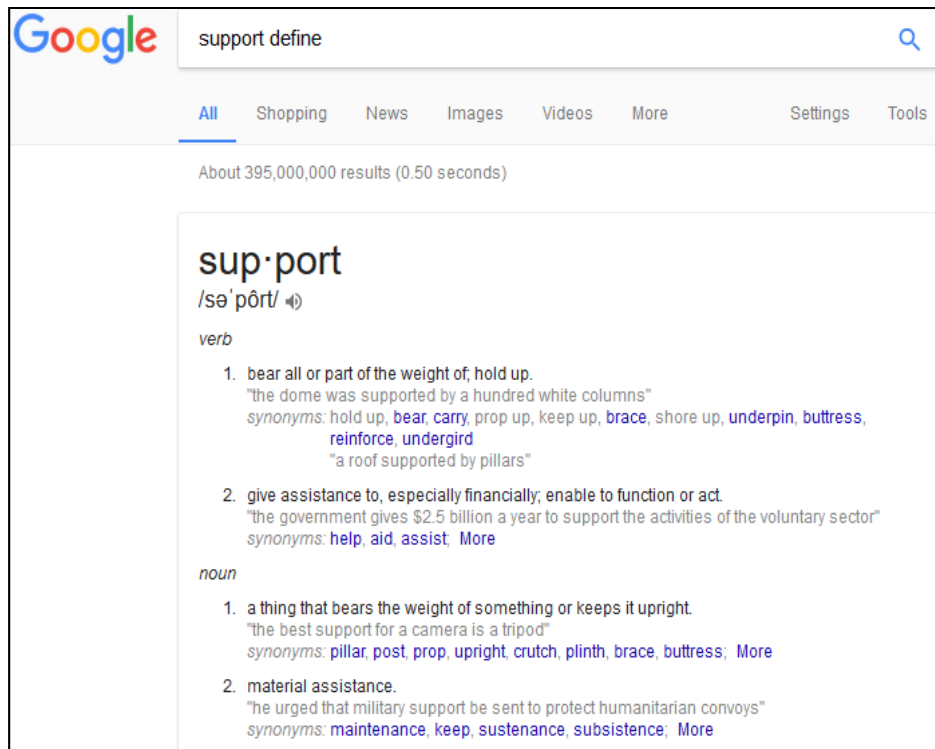
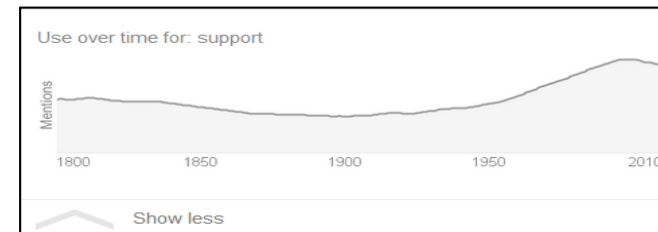


Image 2



Image 3



Google Translate (in the Google interface and in the Google Translate interface)

It is developed by Google company and is multilingual translation software supporting more than 100 languages. The following image 1 and 2 are an example of the Chinese and English translation of the word “simulation” (模擬) in the Google search engine interface. Image 3 show the same example of the Chinese and English translation of the word “simulation” but in the Google Translate interface. [source: Wikipedia - [https://en.wikipedia.org/wiki/Google\\_Translate](https://en.wikipedia.org/wiki/Google_Translate)]

Image 1

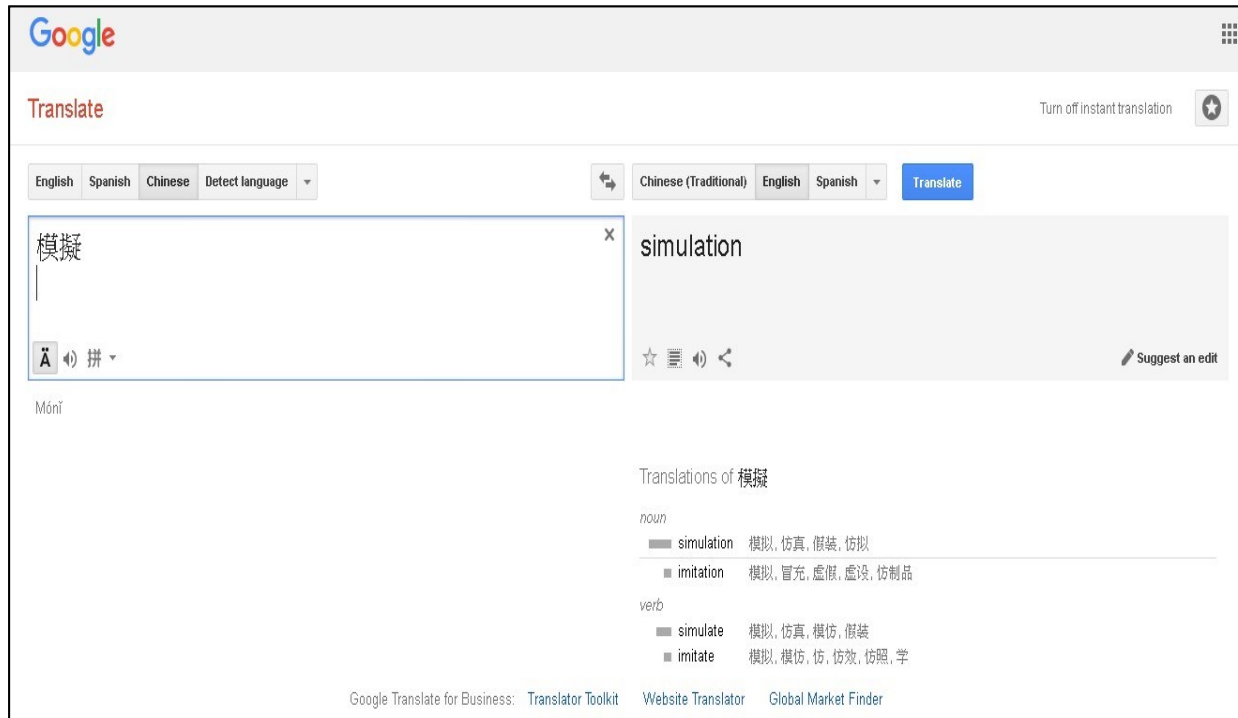


When you click this arrow, you will see the extended options

Image 2



Image 3



Merriam-Webster English dictionary (Feature: American English)

It is an English dictionary developed by Merriam-Webster company, an American company. It features American English and provides a searched word's pronunciation, English definitions, parts of speech, word forms, sentence examples, and origin and etymology of the searched word. [sources: <https://en.wikipedia.org/wiki/Merriam-Webster>; <https://www.merriam-webster.com/>]

Image 1



Image 2

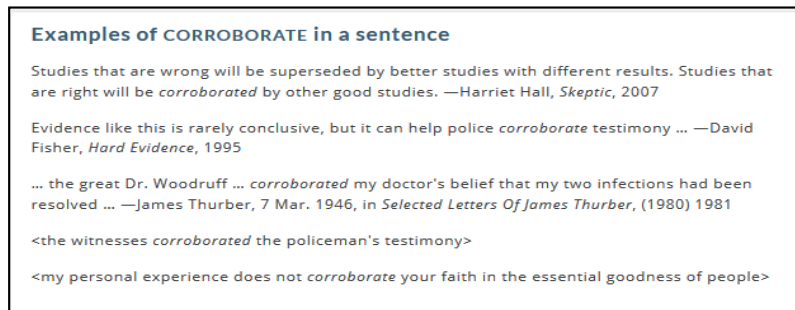
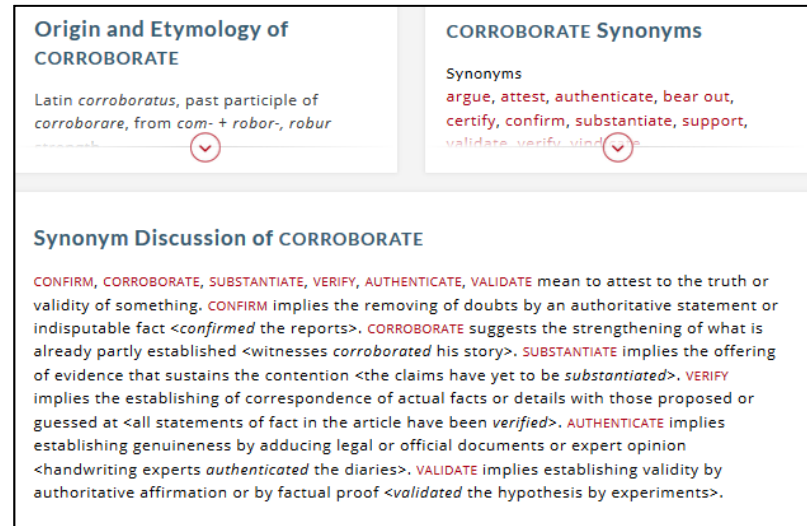


Image 3



*WordReference.com*

It is created by a personal language learner and contains bilingual dictionaries and language forums for language learners from different countries to use. Its bilingual dictionaries include English-Spanish, English-Italian, English-French, Spanish-French, and Spanish-Portuguese dictionaries. Users of the language forums discuss the meanings and translations of words, expressions, and terms in different languages. Tian-You mainly employs its language forums to learn English grammar and usage. [source: <http://www.wordreference.com/>]

Image 1

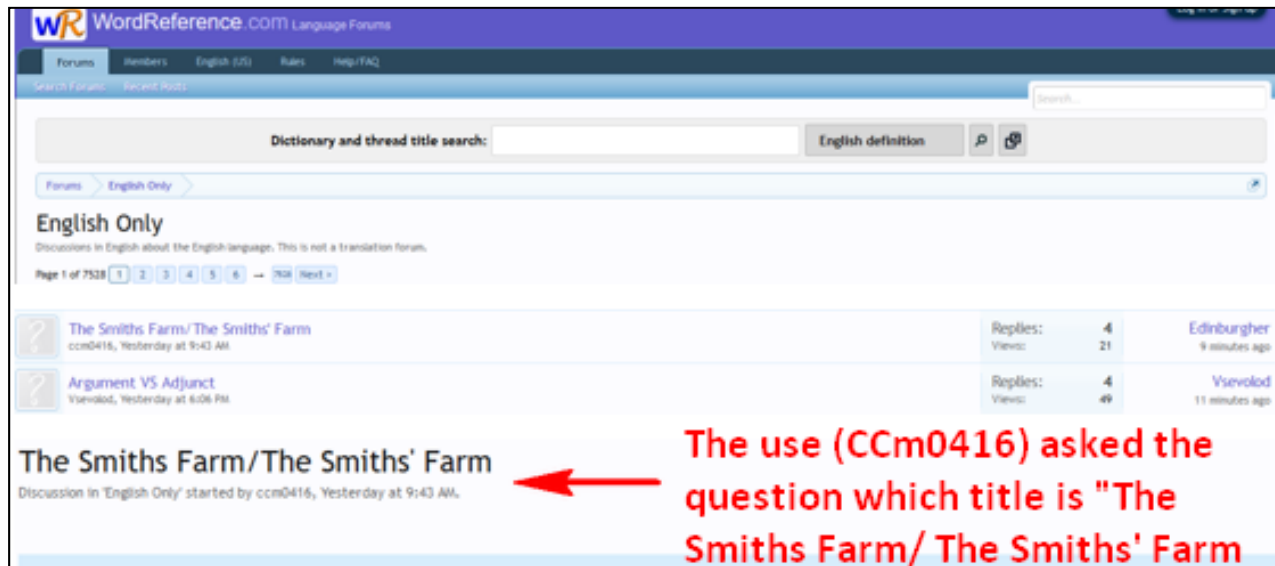
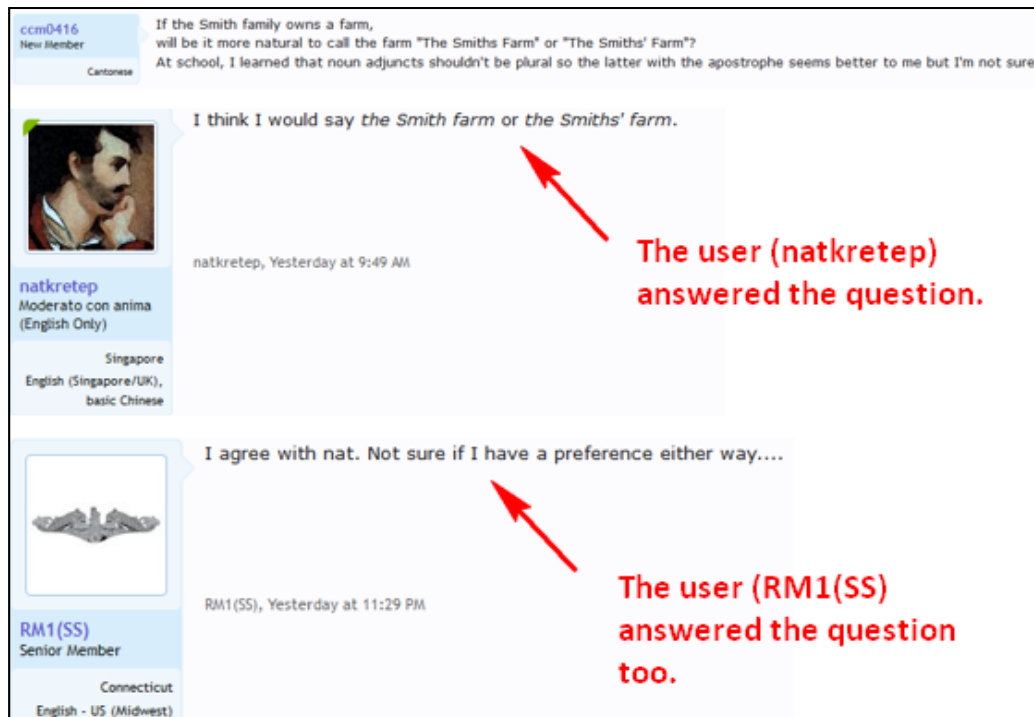


Image 2

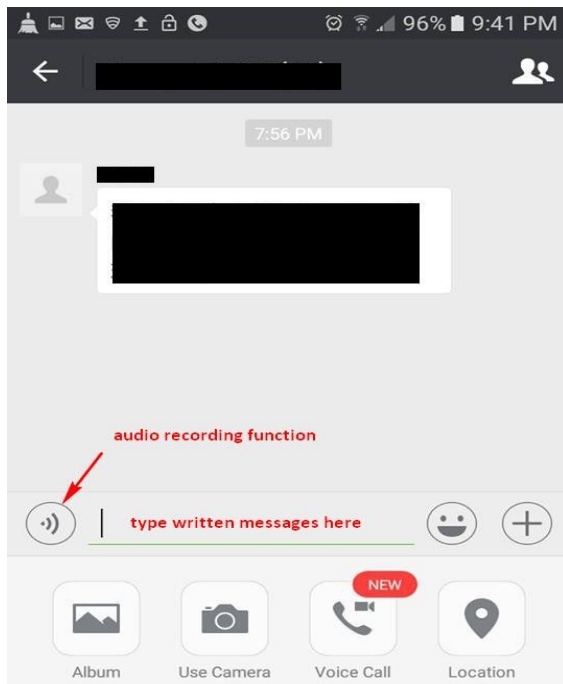




### Online Social Interactional Software

#### WeChat

It is instant messaging software developed by a Chinese company and is one of popular instant messaging software in China. It has web-based and mobile-device-based interfaces. Most users of WeChat installed this software in their smart phones. Cheng-Rui mentioned that he utilizes WeChat to discuss research with peers from China. He uses the WeChat cell-phone-based interface which is more convenient for him to send instant messages to his peers from China. Users could either type or voice or video recording their messages and then send the messages to friends who also use WeChat. Users could also send messages with images that they downloaded online or pictures that they took through the function of the camera in WeChat in their cell phones. Users could send one-to-one or one-to-multiple-people instant messages. Moreover, users could create a group via inviting their peers or friends to mutually chat or share articles, information, or file within the group.





It is instant messaging software developed by a Chinese company and is one of popular instant messaging software in China. It has web-based and mobile-device-based interfaces. Most users of QQ installed this software in their smart phones so it is easier and quicker to send instant messages to their friends or peers. Zhi-Kai mentioned that he employed QQ in his first doctoral year to discuss class assignments with his peers from China. Characteristics of QQ are similar to WeChat. These characteristics include one-to-one and one-to-multiple-people chats via written, voice, and video messages. Messages could include images downloaded from online websites or pictures that were taken by users. Users could also create a group or join a group to mutually chat and share information within the group. Users could also join some existing groups, which discuss various topics, created by other QQ users.

*Line*

It is instant messaging software developed by Line company. It is popular instant messaging software in Taiwan, Japan, Thailand, Indonesia, and other countries. It has web-based and mobile-device-based interfaces. Most users of Line installed this software in their smart phone so it is easier and quicker to send instant messages to their friends or peers. The characteristics of Line are similar to WeChat and QQ. Users could direct call or send instant messages via written, voice, or video messages to their friends or peers. Users could also create a group to mutually chat and share information within the group. There are various groups, which discuss various topics, created by other Line users.

Image 1

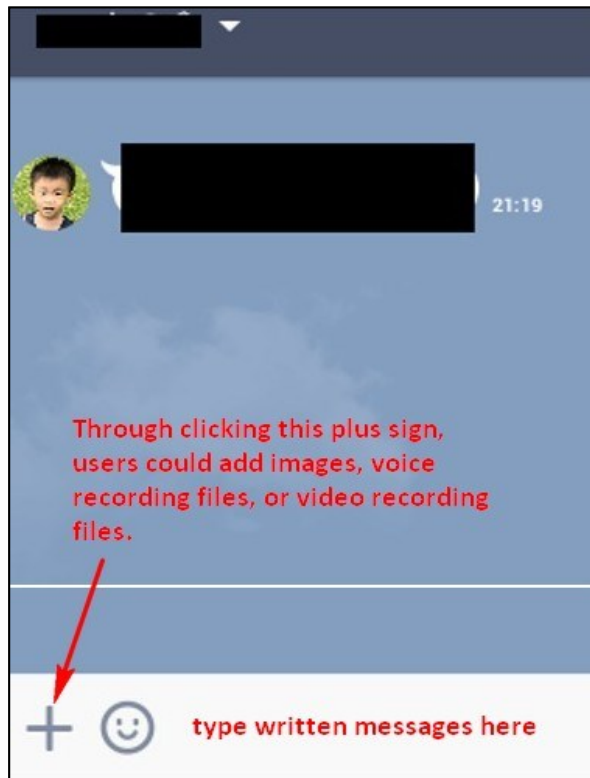
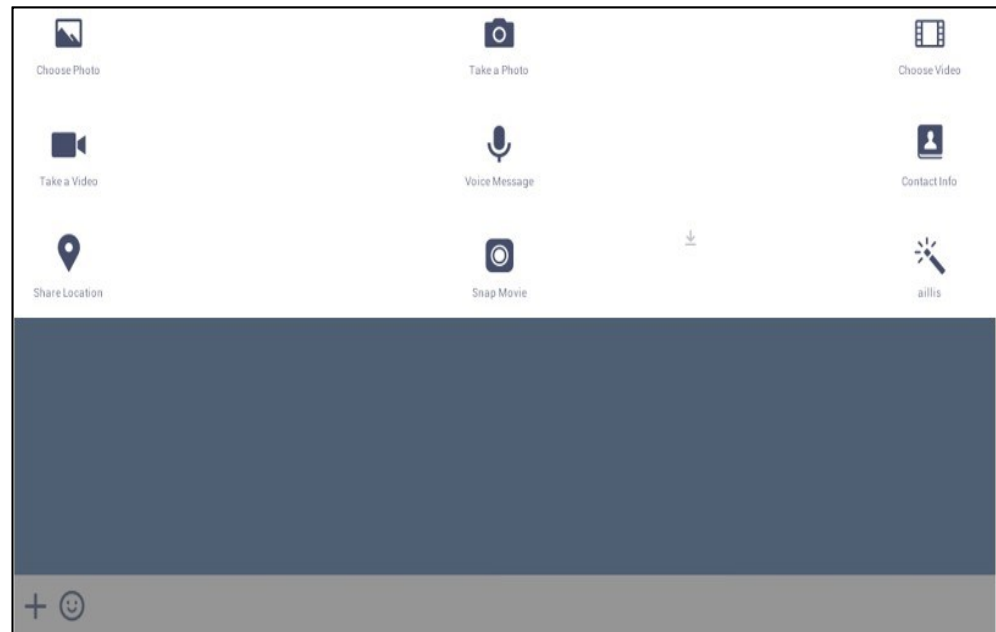


Image 2



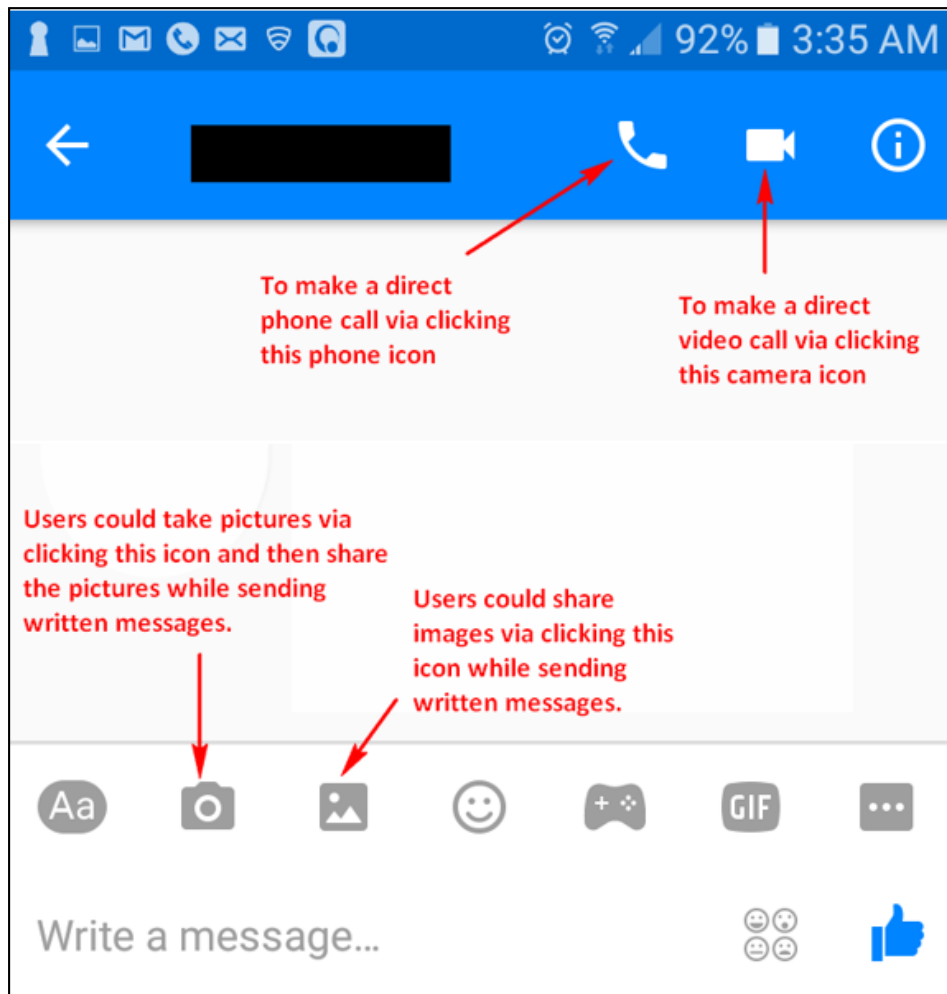
*Facebook* (including Facebook Feed, Facebook groups, and Facebook Messenger)

It is a popular social networking website in many countries. It has web-based and mobile-device-based interface. The three participants in this study utilize it through the web-based interface on their computers and mobile-device-based interface in their cell phones. Users interact with other users of Facebook through adding them as “friends” into their own Facebook accounts. Then, users could share information with their friends through posting messages in their Facebook accounts. Messages could be written words, images, videos, or links. Users could create a group and invite their friends or peers to join the group so they could share information within the group. There are also various academic and non-academic groups that other Facebook users created. More and more academic institutions and organizations employ the function of the Facebook group as one of ways to advertise their services and interact with their members. In addition, some educators create a Facebook group to share information, discuss class related topics, and interact with their students. New posts of users’ friends or groups users participate in will appear in the area of “News Feed” as shown in the below image 1. Facebook also provides instant messaging service which is called Messenger. Users could send written or voice messages to their friends or peers who also use Messenger. They could also directly voice or video chat with their friends and peers.

Image 1

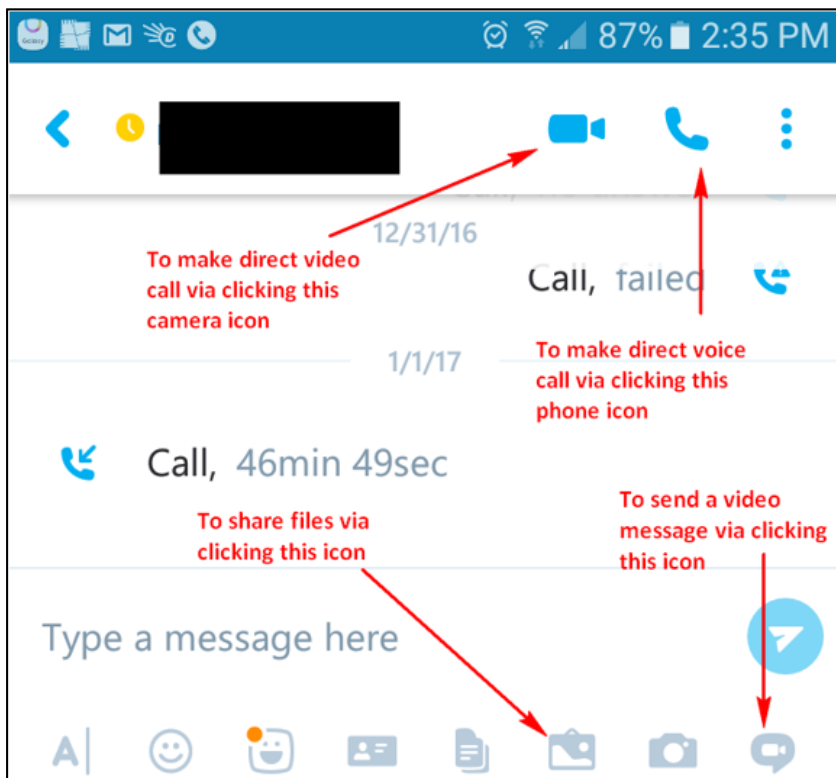


Image 2



Skype

Like WeChat, QQ, Line, and Facebook Messenger, Skype is instant messaging software and could be installed and utilized through a personal computer, laptop, tablet, or cell phone. It is widely used in many countries. The characteristics of Skype are also similar to other instant messaging software. Users could make direct voice and video calls. They could also send instant messages via written, voice, and video messages. Moreover, they could share pictures and files through instant messages. Furthermore, they could make a call or send messages within a group via creating a group which they invite their friends or peers to join the group.



### *LinkedIn*

It is a professional social networking website mainly used for employers to post jobs and job seekers to post their resumes. Moreover, users of LinkedIn could create their online profiles and make connections with other users of LinkedIn whom they know each other so these online social connections represent actual professional relationships (Wikipedia....). In addition, there are numerous groups created by other users. After joining a group, users could share links and post questions and invite other users in the group to discuss. The following image 1 and 2 are that Cheng-Rui participated in the group of “Oil and Gas Corrosion and Material Selection” in LinkedIn. A member (Hasan Eghbaly) posted a question which title of the post is “removing corrosion product on the pitting area. Other members (e.g., Ajit Mishra and Anupam Gandhi) discussed the questions via posting their comments below the question. [Wikipedia: <https://en.wikipedia.org/wiki/LinkedIn>]



Image 1

The screenshot shows a LinkedIn group page for "Oil and Gas Corrosion and Material Selection" with 33,258 members. The group is currently in a discussion phase. The main post is by hasan eghbaly, an engineering top contributor, asking about the best way to remove corrosion products from pitting areas in a tank. He mentions that demineralized water is used but cannot be painted to reduce corrosion. Below the post, there are two comments: one from Ajit Mishra, a Staff Engineer at Haynes International, who explains that corrosion products can act as a physical barrier layer, and another from Anupam Gandhi, a Managing Director at Gfluro coatings pvt ltd, who says "Yes can contact". The right sidebar features a "Top Contributors" section with hasan E. engineering, a "Your group contribution level" progress bar at "Getting Started", and several advertisements including "Biosafety Cabinet Tips", "PCT HD for Biomarkers", and "Learn from anywhere now".

Image 2

