

Improve English Education in Taiwan by Using ICT and Corpora Resources

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About COOL ENGLISH

The Team



Ministry of Education



建置



COOL ENGLISH

英語線上學習平臺

For all Elementary and Junior High School Students in Taiwan



語音辨識專家 陳柏琳教授



多媒體專家 曾俊傑教授



數<u>位遊戲</u>專家 陳志洪教授



陳浩然教授



語料庫專家 賴淑麗教授



計算機語言專家 高照明教授



詞彙<mark>學習</mark>專家 楊小慧教授



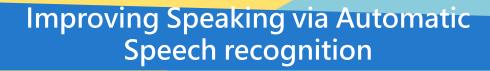
COOL ENGLISH Key Features



Enhancing Listening with Animated Videos- 600 more



Enhancing reading skill via multimedia content





multimedia content



Improving vocabulary via Extensive topicbased vocabulary exercises.

Motivating Learners with various kinds of online games- HTML5 game and Unity games





Interactive Textbooks for Remedial Learning



Providing all the answers for the questions of entrance exams.







Intro

Using the powerful authoring tool called **GoAnimate**.

Providing all kinds of stories and situated dialogues for students.

Animated video & annotation



部編本動畫一講解版影片

Even we add in more Chinese explanations for students.





Listening

Dialogues in various situations



情境式對話一動畫影片

Exercises for Each Video

	Good morning, Mr. Brown.	
	on Mr Drawn	
Mary: Good morning	ig, ivir. Brown.	
Mary: Good mornir Mr. Brown:	, Mar	y.

部編本動畫一測驗題

Interactive exercises and students can get immediate feedback.





Highly interactive viewing system

Intro

- 1. The audio and text synchronization.
- 2. Users can even choose to slow down the speech rate
- 3. Consult dictionary at any time
- 4. Saving new words for later

Highly interactive viewing tool









Intro

We worked with experts from computer science and develop an fully automatic speech recognition system for students.

Listening and Speaking

Topic 11: Getting Up 請點選 (4) 聽正確發音		按此鍵錄	綠音並說出句子
1. A: What time is it, Mom? B: and go to school 聽取題目		get up	按此開始錄音
A. Seven o'clock.	в Ten o'clock.		c. Twelve o'clock.
聽取選項發音 2. A: Oh, my god. I'm going to be late to go to school today.	•	n't have	按此開始錄音
A. It's Friday.	в. Today is a holida	y. ()	c. You need to get up.

語音辨識—基本操作





Automatic Speech Recognition

Correct Students pronunciation

Conversation Exercise Topic 55: Shopping in the supermarket 請點遷《》聽正確發音 1. 我在哪裡拿得到購物籃? Where can I get a shopping basket? 1. 我在哪裡拿得到購物籃? Where can I get a shopping basket Where can I get a shopping basket? Problematic parts Listen to correct will be highlighted pronunciation

Various types of ASR exercises



提供**會話問**



仿、常用短

「聲」歷其境

語練習以及

基礎母/子音

發音等多種

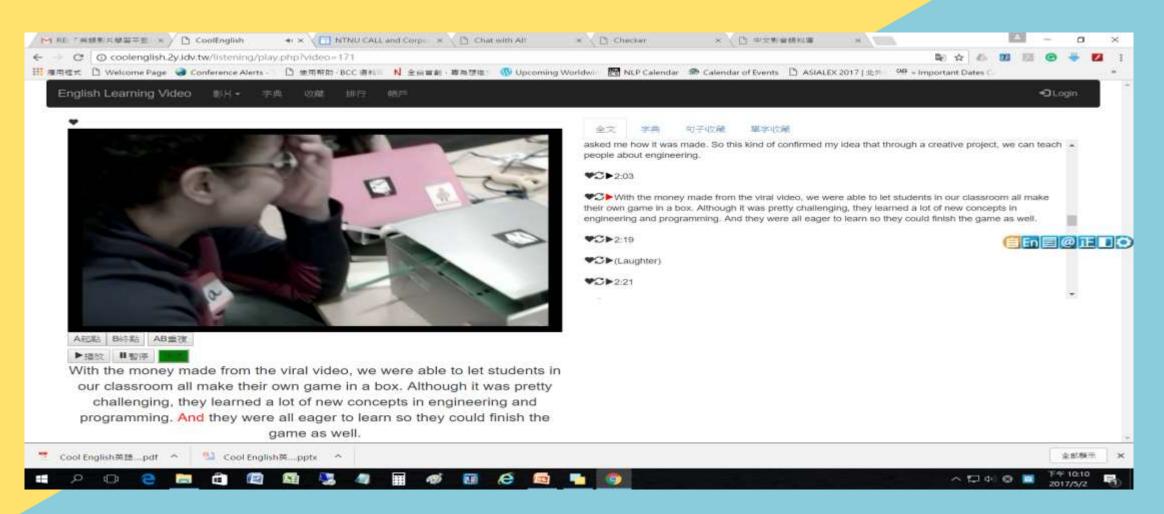
題型,滿足

學生不同練

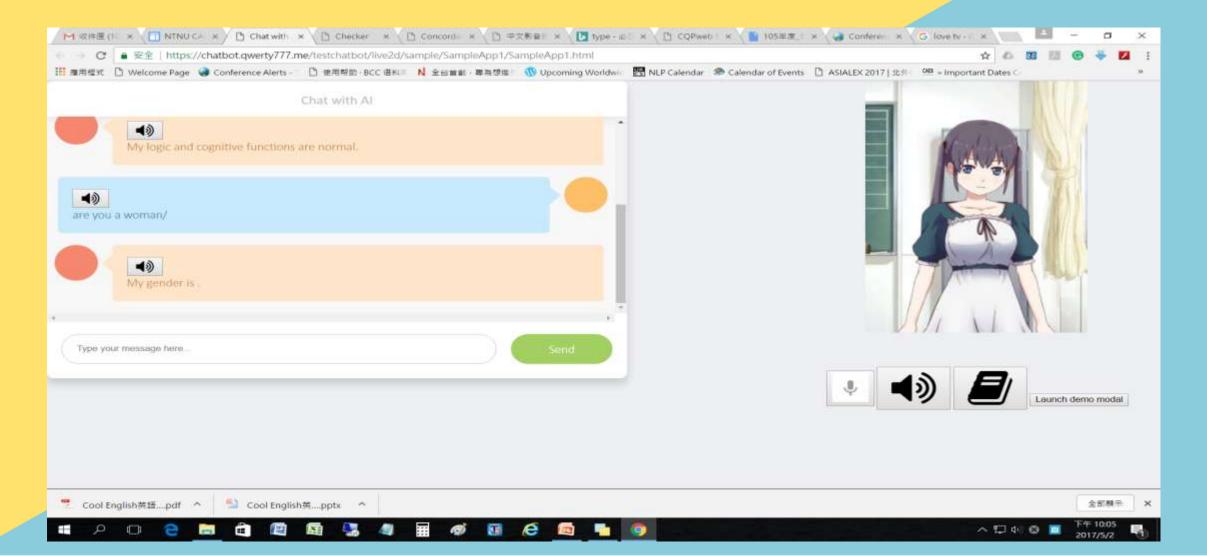
習需求。

TED talk example

http://coolenglish.2y.idv.tw/listening/play.php?video=171



ASR and Chatbot











VOA news

Annotation for difficult words



The dogs were trained to lie down in the machine for seven minutes. During that time, they listened through headphones to their trainers' voices.

Dog owners may think the news is not surprising. But scientists are impressed.

Vocabulary

VOA新聞一難字註解

- headphone (n.) 頭戴式耳機
- trainer (n.) 訓練員
- impressed (adj.) 印象深刻的

將困難的單

字加註中文

註釋,避免

學生因碰上

難字而產生

閱讀障礙。

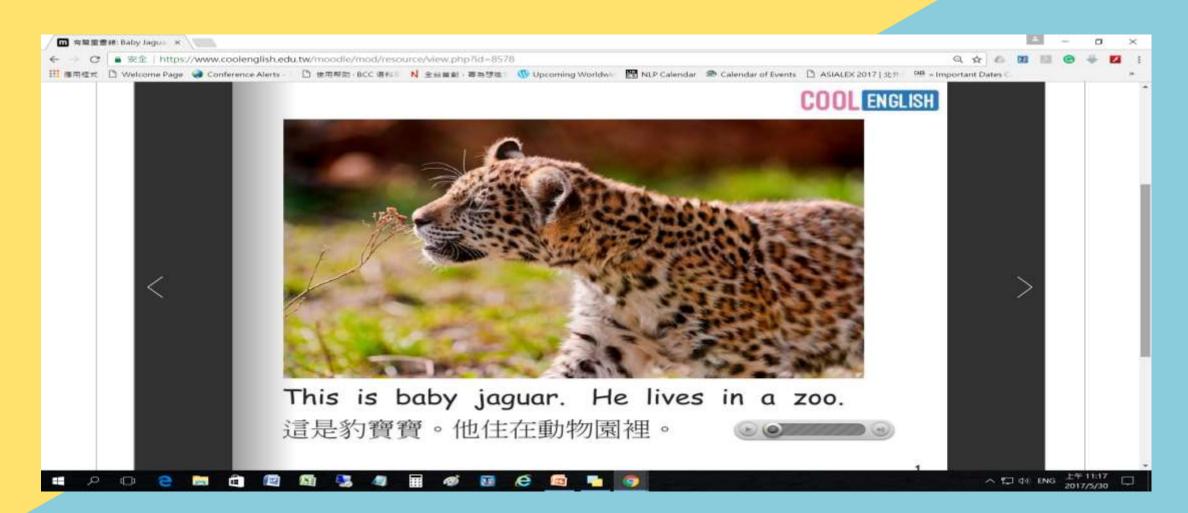
Post-reading comprehension test



VOA新聞一讀後測驗

邀請教師針對文章內容命題,學生可透過閱讀測驗來檢視理解程度。

Kid's Reading Materials







Bilingual concordancer- can search Chinese and English words and phrases



Corpus-based materials

We have developed the bilingual tool- L1 can play a role for language learning. Students can search the expressions they need using the tool.

Search words and phrases

Karen began collecting toy cars at the age of nine. Since then, she has spent lots of time and money on this hobby. 凱倫九歲就開始蒐集玩具汽車。從那時候開始,她已經在這項嗜好上投注了許多時間和金錢。

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Their sad faces made her decide to help, so she left school and started to work at the age of fifteen. 看到他們傷心的臉龐,她決定要幫忙,因此十五歲時,她離開學校開始工作。

Remember Tony and Peter, the twin brothers who started singing at the age of five? 記得托尼和彼得這對五歲便<mark>開始唱</mark>歌的孿生兄弟嗎?

It was really good to hear from you again, but I was surprised to learn that you started smoking soon after you went to the U.S. 收到你的信真高興。不過聽你說,到美國不久就開始抽煙,我很意外。

I rode very fast and **started to** cry for help, but no one was there. I was too scared and too tired **to** ride any faster. **At** last, I gave up. 我騎得很快,並開始呼救,但附近都沒有人。又累又怕,我沒有辦法再騎更快了。最後,我放棄。

Clara, however, started to play the piano in publicat the age of nine and was very successful. 然而,克拉拉卻在九歲時就開始公開演奏鋼琴,且非常成功。





Grammar Resources



Video for grammar Learning



文法英語電力公司

國教院製作 之文法影片, 學生可針對 不熟悉的文 法概念觀看 主題影片, 並回答主題 式測驗測試 理解程度。

Animated videos for various grammar topics



輕鬆學文法動畫影片

精挑12個文 法主題,針 對各個主題 製作真人旁 白解說的文 法動畫影片





Grammar Exercises



VOA animation for learning grammar



VOA文法動畫影片

選自VOA製 作的文法動 畫影片,有 基礎文法、 日常英語、 旅遊英語、 商業英語 4大類。

VOA grammar Lessons.

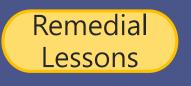


VOA每日文法

選自VOA的 文法教學影 片,依據主 題進行分類, 配上全程中 文字幕,讓 學生更輕鬆 了解影片內 容。



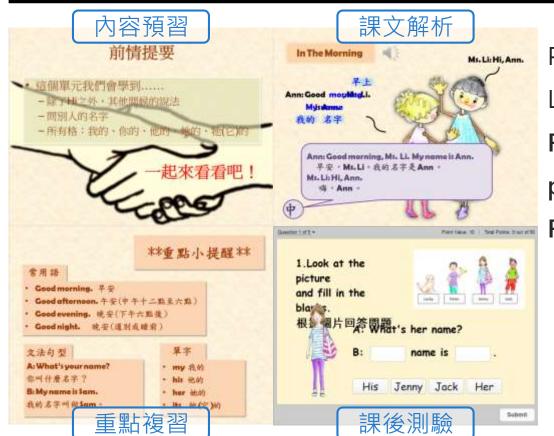




MOE has the paper version

Paper version is less interactive and difficult to use.

We created this digital version and allow more students to learn more easily and efficiently.



Previews

Lessons

Review of key points.

Review tests





Test for Entrance Exam



Provide explanations for the test items.



測驗試題呈現

Covering various types of items



測驗解析呈現

每道試題都搭配解析,整理單字、文法句型及翻譯,也針則驗選項作解釋,讓

同學完整了

解試題內容。









Game

We used the famous Unity engine to 「魔物學園」
(Academy City), to develop an RPG game, It is a game what you can have fun and learn English at the same time.

There are four chapters in this games

故事背景





英語闖關

操作介面





英語對話





APP Games

專區簡介

APP for free download.
You can enhance your
Vocabulary knowledge
by playing these
various games.

Various vocabulary learning



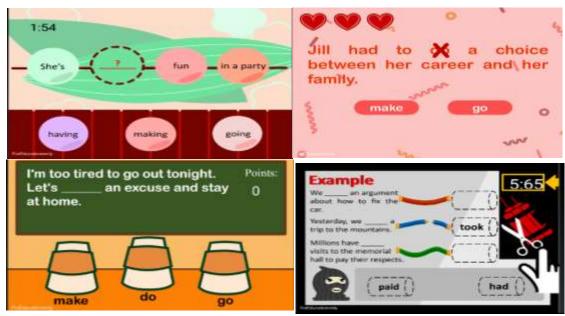
四款字彙遊戲畫面截圖





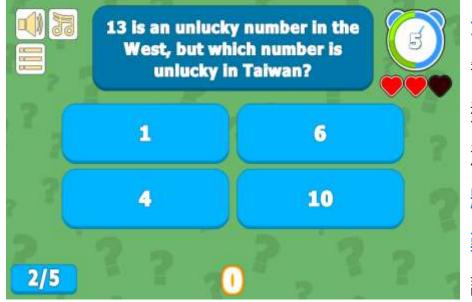
APP games

Collocation APP game-



四款搭配詞遊戲畫面截圖

Gaining more knowledge via APP



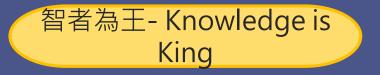
英語益智問答遊戲畫面截圖

全英文的益 智問答手機 遊戲,題目 涵蓋12大主 題,並按照 難度分級,

讓學生盡興 選擇想要遊 玩的關卡。20







Introduction

"Knowledge is king"
is a game developed
with Unity. It provides
several hundreds of
interesting questions
for students to answer.

Play with your classmates or computer



單人闖關(上圖)與雙人對戰(下圖)

You can play with the computer if you need practices or you can allow the program to match you with another student. You two can begin a game





Knowledge is King

Rich database covering 12 areas

Knowledge Is	King 題庫主題分類
1.Computer Science	7.Physics
2.Geography	8.Chemistry
3.Plants	9.Animals
4.Maths	10.Art, Music,& Literature
5.Earth & Space	11.Sports
6.Human Physics	12.Taiwan Facts

題庫主題分類表

Covering various topics

From simple to more difficult items.



遊戲關卡列表

依主題和難 度分類在不 同的關卡階 段,讓學生 能**循序漸進** 度的題目。





Search specific learning content

Search Function

Learners can type in any words or phrases to search for the content.

They can also use the suggested classifications to search for the content.

Feature —Search for Content

輸入關鍵字	
"進行式"的搜尋結果:]	148
情境動畫聽講(國中專區)	
Lesson 15 Quiz : On The Str	reet
依標籤類別搜尋	
依標籤類別搜尋 請選擇標籤類別	
請選擇標籤類別	版 TENSE/過去簡單式 PAST SIMPLE TENSE"的搜尋結果 : 190

內建選單查詢結果







Intro

Teachers are able to manage their classes, And they can also view individual learners' performances in various sections.

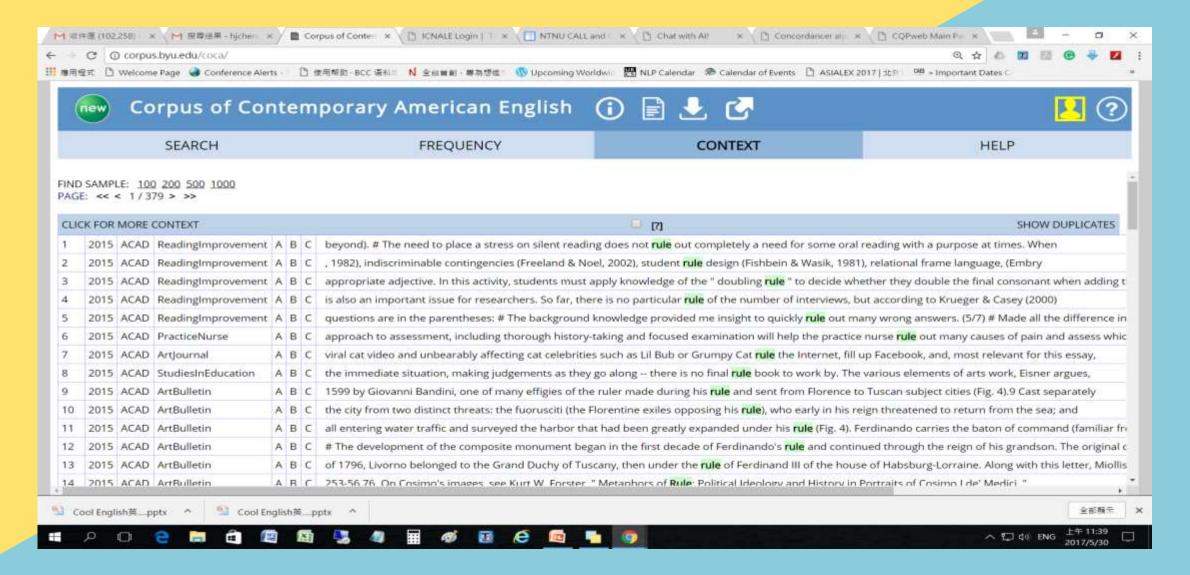
Viewing Students' Performance



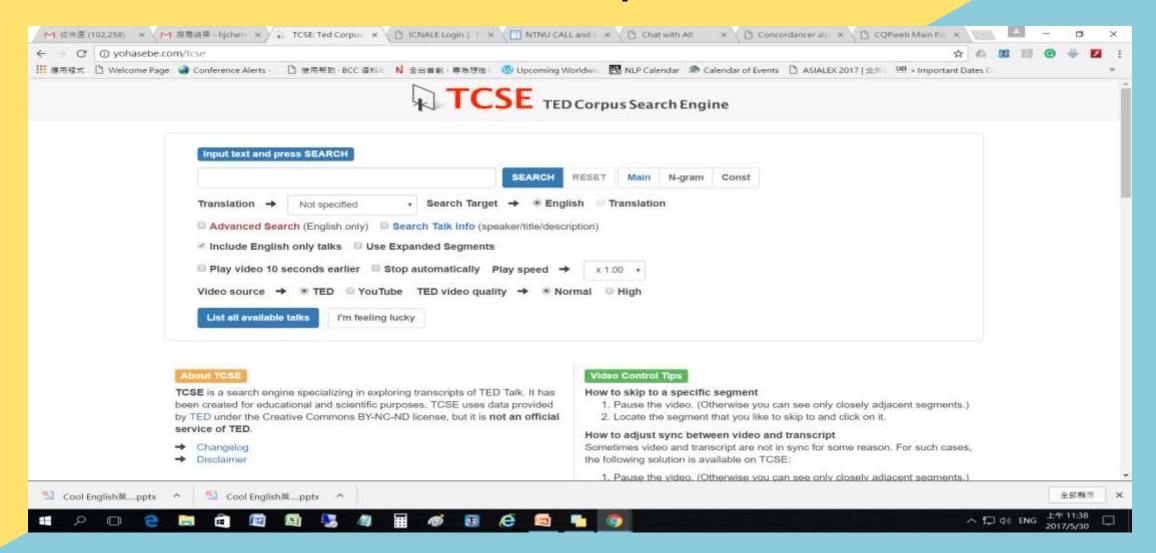
How Corpora Can Help Language Learning?

- 1. Existing Good corpus site: BNC, COCA for data-driven learning
- 2. Any good spoken corpus- like TED corpus
- 3. Can we upload our own corpus? What to upload?
- 4. The needs for specialized corpora. Academic or others.
- 5. Learner Corpus
- 6. Good tools are freely available.... SKELL and others.

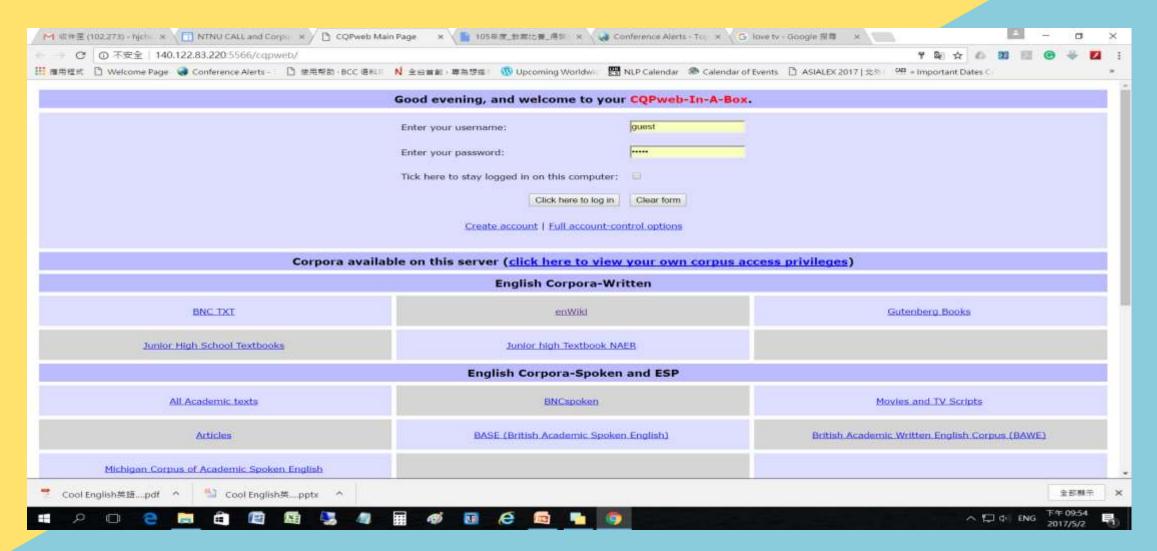
COCA



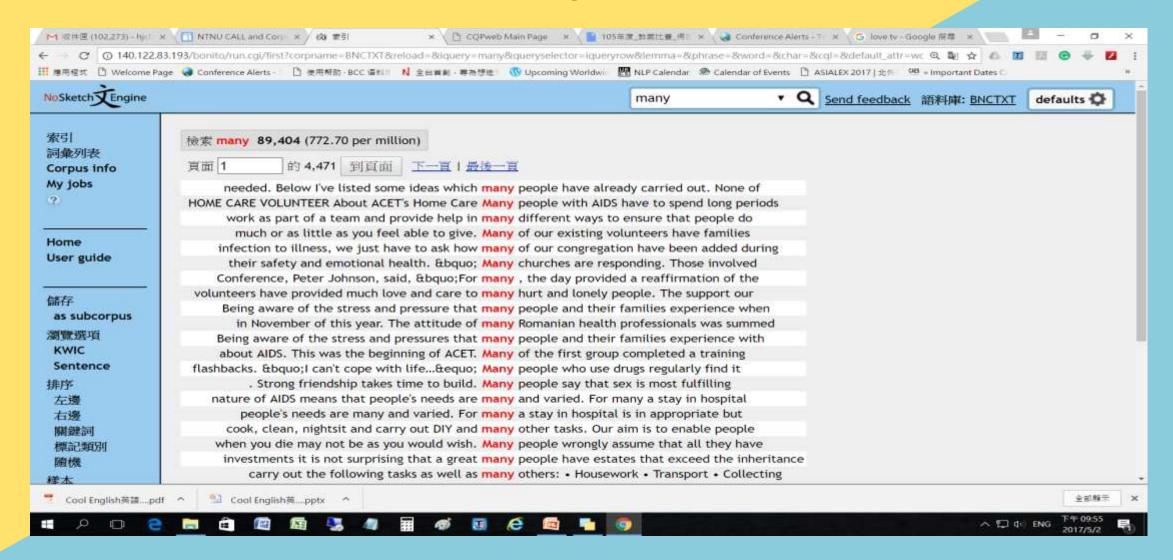
TED Search Tool in Japan



NTNU CQPweb



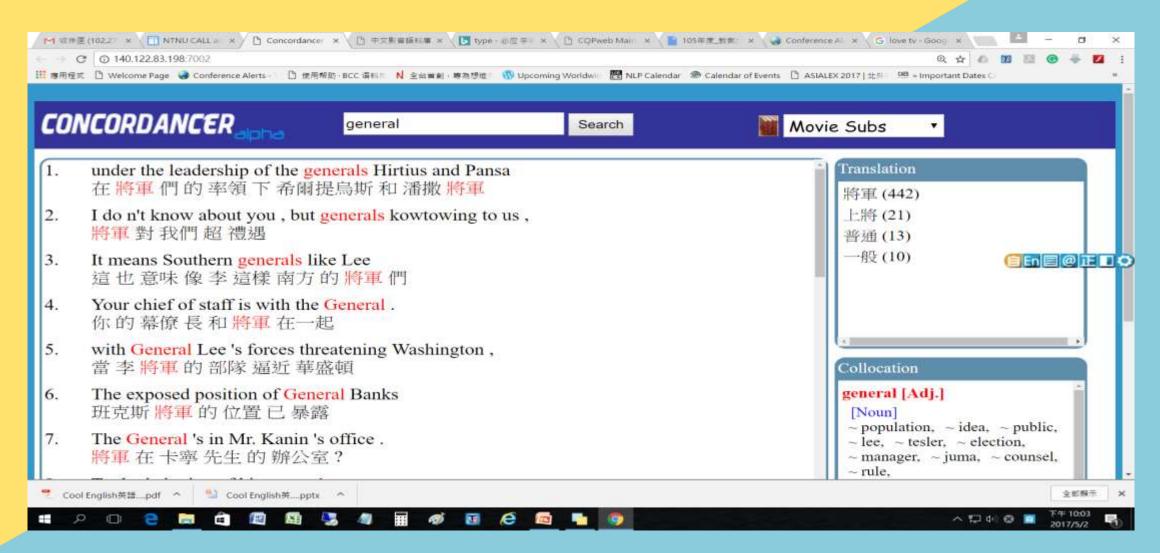
NTNU Nosketch Engine



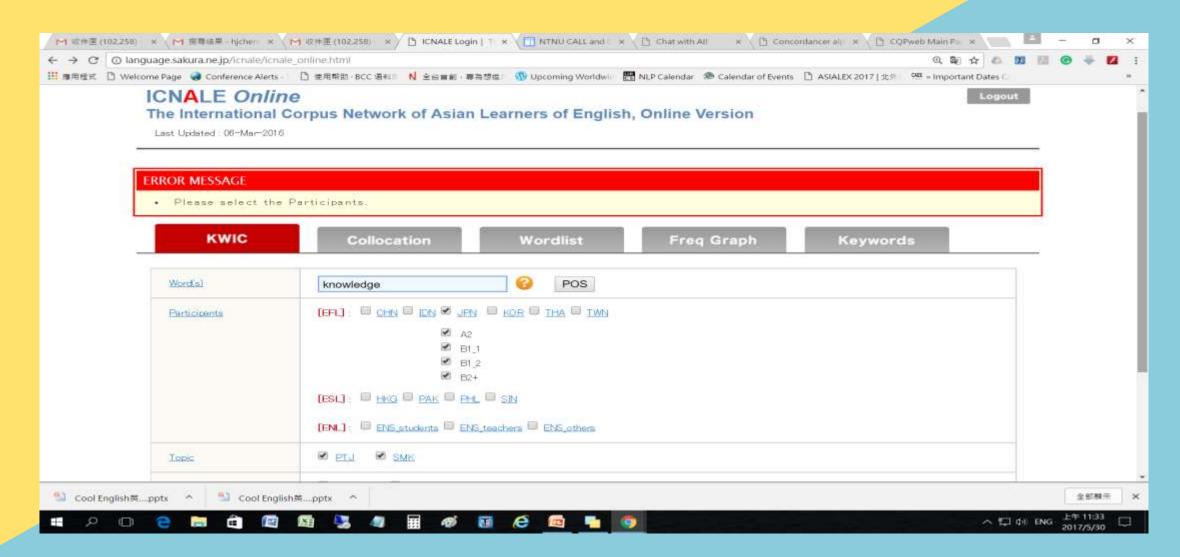
Concordancing with Chinese Audio support



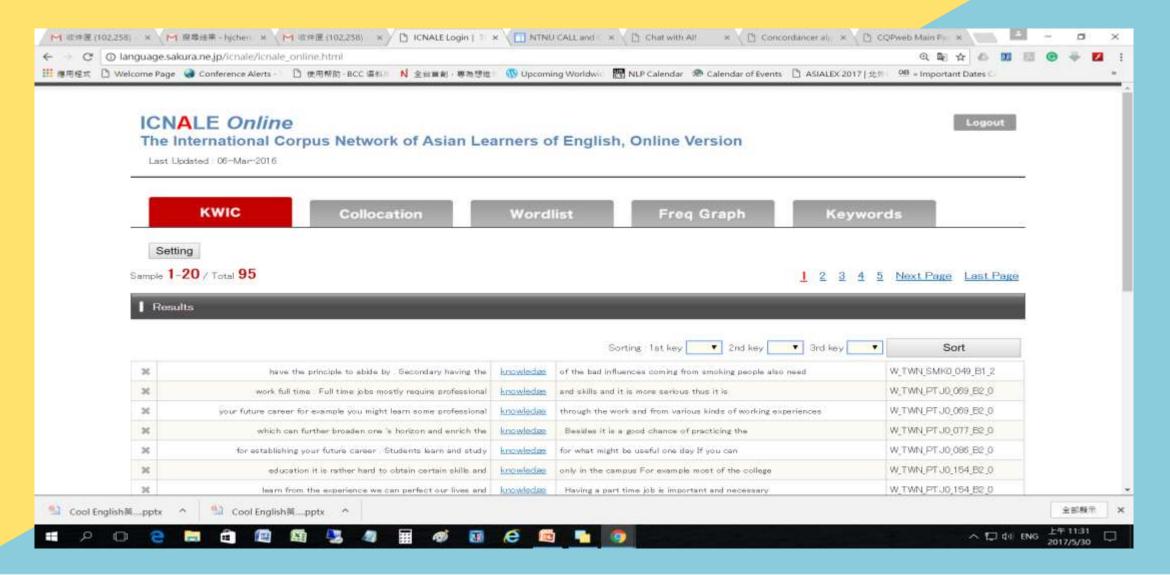
NTNU Bilingual Corpus



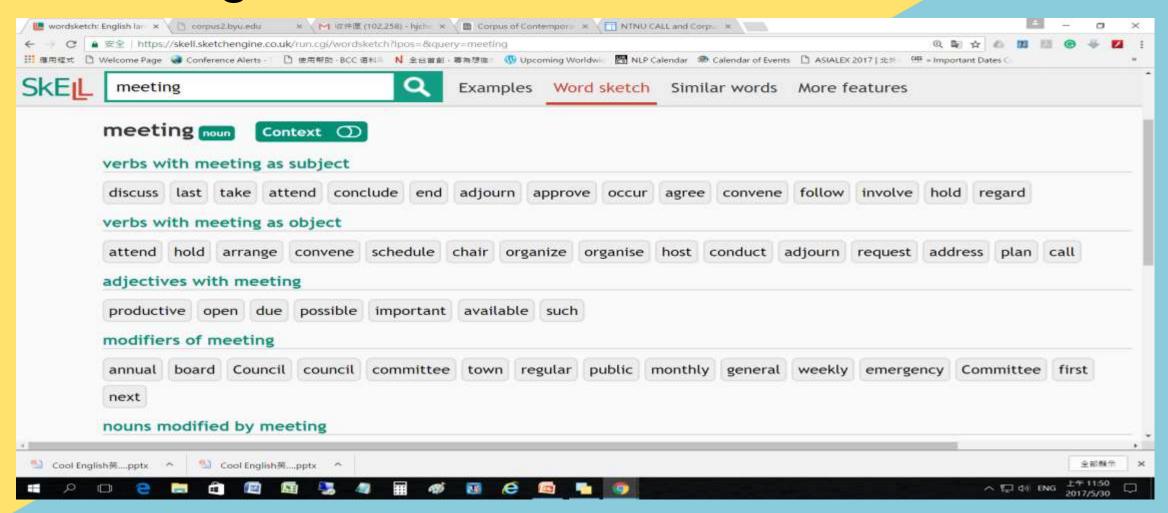
ICNALE: Japanese ESL Learners Corpus



Learner Corpus ICNALE



SKELL: a robust tool for collocation learning



Freely Available Corpora for Teaching and Learning

- Friends (Sitcom transcripts)
- Novels by Charles Dickens
- Business English Corpus
- English Preposition Corpus
- BAWE
- BASE
- ACL Anthology Reference Corpus (ARC)
- British National Corpus (BNC)

- Open American National Corpus (spoken)
- Open American National Corpus (written)
- Project Gutenberg English
- English Wikipedia





Thank you for your attention

