香港教育大學
The Education University of Hong Kong

A Corpus-aided English Pronunciation Training Programme

(Workshop 1)

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語言學及現代語言系
LINGUISTICS AND MODERN LANGUAGE STUDIES

英語教育學系
ENGLISH LANGUAGE EDUCATION

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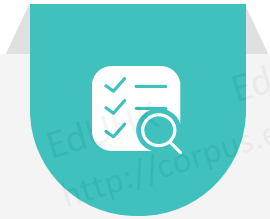
This Training Programme…

Broadcast Live

Topic	Date	Time	Venue
Workshop I – Introduction of spoken corpus, phonetics and phonology, and pronunciation features; Exploitation of corpus data to do phonological analysis of segmental features	23-Oct-2019 (Wed)		
Online Lesson I – Basic concepts of spoken corpus, segmental system of English and pronunciation features; Phonological analysis of segmental features	25-Oct-2019 (Fri)		
Workshop II – Exploitation of corpus data to do phonological analysis of suprasegmental features (word stress, intonation); Introduction of speech rhythm, linking, pause, and speech rate	30-Oct-2019 (Wed)		
Workshop III – Discussion of the benefits of doing corpus-based analysis through speech corpus and how we can use the findings in the language classroom	6-Nov-2019 (Wed)		
Online Lesson II – Basic concepts of suprasegmental system of English, and pronunciation features; Phonological analysis of suprasegmental features	8-Nov-2019 (Fri)		
Workshop IV – Development of teaching materials for primary and secondary students; Competition	20-Nov-2019 (Wed)	15:30pm-17:30pm	B4-LP-03

This Workshop

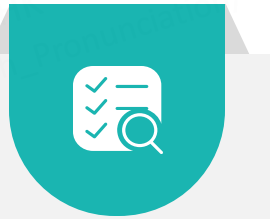


- Definition of Corpus;
- Spoken Corpora ;
- Overview of Phonetics and Phonology;

Part 01 – Introduction

- Pronunciation features;
- Our corpus;
- Selected findings from corpus-based research;

Part 02 – Exploitation



- Hands-on practice: Phonological analyses through our corpus.

Part 03 – Exploitation

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Pronunciation Teaching

- Do you teach English pronunciation?
- Do you enjoy teaching English pronunciation?
- What teaching methods do you prefer to teach English pronunciation?

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Way to Enhance Subject Knowledge

- Textbooks
- Dictionary
- Internet
- ***Corpus Tools***

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Corpus Linguistics & Teacher Education

What is a corpus?

- A corpus is a large, principled collection of **naturally occurring texts** (written or spoken) stored electronically.

(Rappen, 2010)

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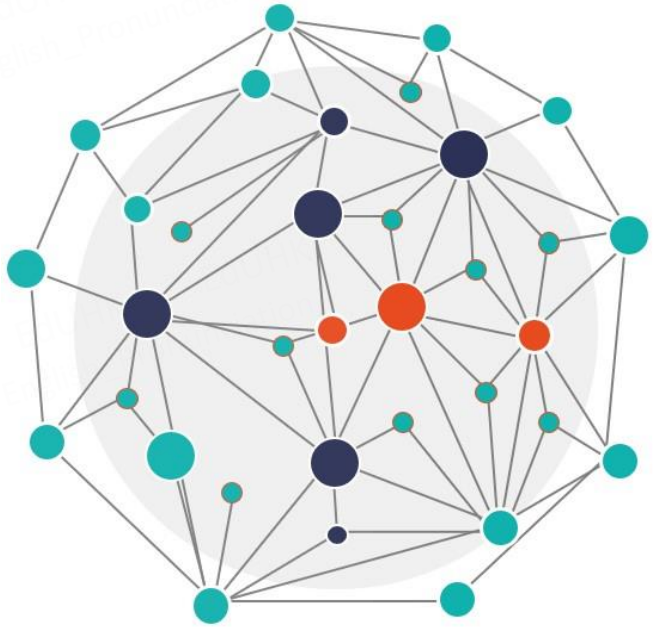
CALL & DDL

- Recent research on ***Computer-Assisted Language Learning (CALL)*** and ***Data Driven Learning (DDL)*** has yielded a common understanding that the use of language corpora in the second-language classroom is of great pedagogical value because it can facilitate students' input of authentic language and motivate students to **analyse the language by themselves**.



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CALL & DDL

- Gut (2005) claimed that the corpus-based “data-driven learning” could motivate students to speculate about language structures and develop the ability to **discover language patterns** using authentic language data.

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Corpus & Teachers

- The vigorous development of language corpora has greatly influenced language teachers, because the corpus-based approach not only **provides teachers with various teaching materials and resources** that can be used in their daily teaching, but more importantly, it also helps **shift teachers' role from the knowledge transmitter to a facilitator** in a **student-centered** learning environment.

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Corpus & Teachers

Language teachers must self-access the corpora or corpus-based reference materials to develop their ability to use corpora for teaching.

(McCarthy, 2008; O'Keeffe, McCarthy, & Carter, 2007)

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Spoken Learner Corpora

Spoken Corpora

- ***Spoken corpus*** is a database which incorporates speech audio files with text transcriptions and different levels of annotations for various purposes.

- ***Two types of spoken corpora:***
    1. reading speech (e.g., broadcast news and passage reading);
    2. spontaneous speech (e.g., dialogues and conversations)

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Learner Corpora

- The majority of current data driven learning studies have focused on **native speakers' corpora.**

- Relatively fewer studies have investigated how **learner corpora**, which consist of language produced by language learners, can be integrated into classroom teaching.

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Learner Corpora

- Gut (2005) argued that **a comparison between native and non-native data is beneficial to language learners** because it can enable them to **notice the typical errors of learning English and develop their ability in identifying the differences** between native and non-native speakers.

- "By observing the **most frequent and typical errors** of learners, students might become more aware of the features of **their own interlanguage** and possibly stimulate a **restructuring of their own language use and knowledge** " (Gut, 2005, p. 1).

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Four Corpora

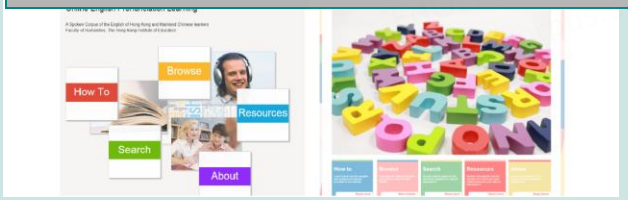
1. The Speech Accent Archive
http://accent.gmu.edu/

2. International Dialects of English Archive (IDEA)
https://www.dialectsarchive.com/dialects-accents

3. EdUHK Corpus 1

4. EdUHK Corpus 2
http://ec-concord.ied.edu.hk/phonetics_and_phonology/wordpress/?page_id=2149

The traditional listening tests or learning tasks include only standard American accents. We believe that varying the accents used in the listening tasks would be very helpful for students because English is an international language, and we are likely to need to communicate with a variety of English speakers. With different English accents represented in the learning tasks, students can learn the varieties of English that listeners would likely be exposed to both in learning English and in hearing it spoken in the international workplace.



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Four Corpora

- The Speech Accent Archive

Speech Accent Archive provides a large set of speech samples from a variety of language backgrounds. Native and non-native speakers of English read the same paragraph and were carefully transcribed with International Phonetic Alphabet (IPA).

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Four Corpora

- International Dialects of English Archive (IDEA)

The International Dialects of English Archive was created in 1998 as the internet's first archive of primary-source recordings of English-language dialects and accents as heard around the world. With roughly 1,500 samples from 120 countries and territories, and more than 170 hours of recordings, IDEA is now the largest archive of its kind.

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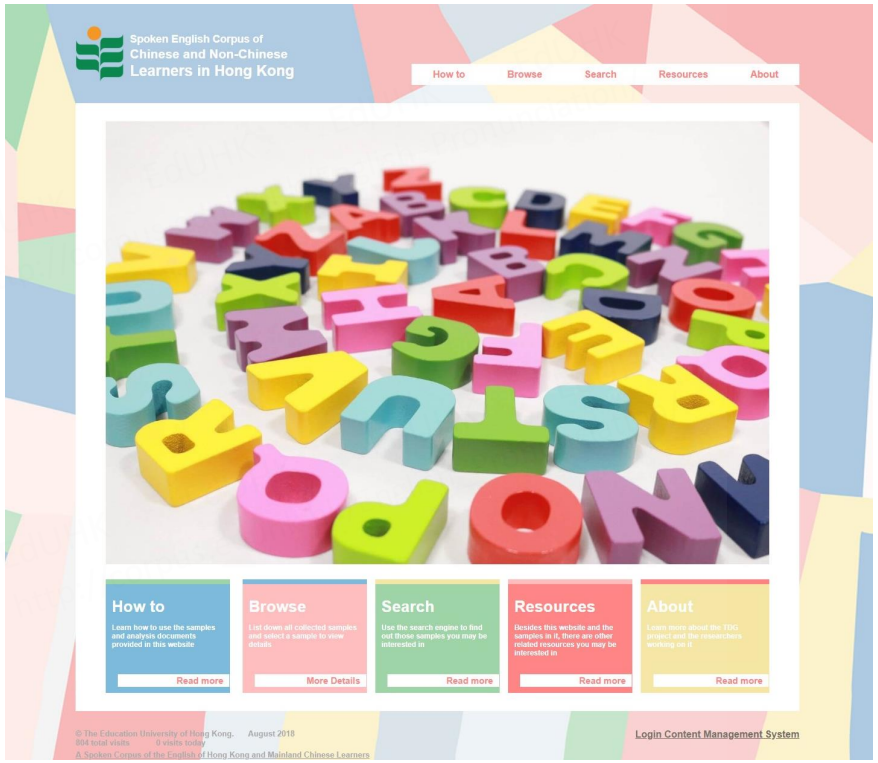
Our Corpora

- EdUHK Corpus 1
- **EdUHK Corpus 2 – *Our New Corpus***



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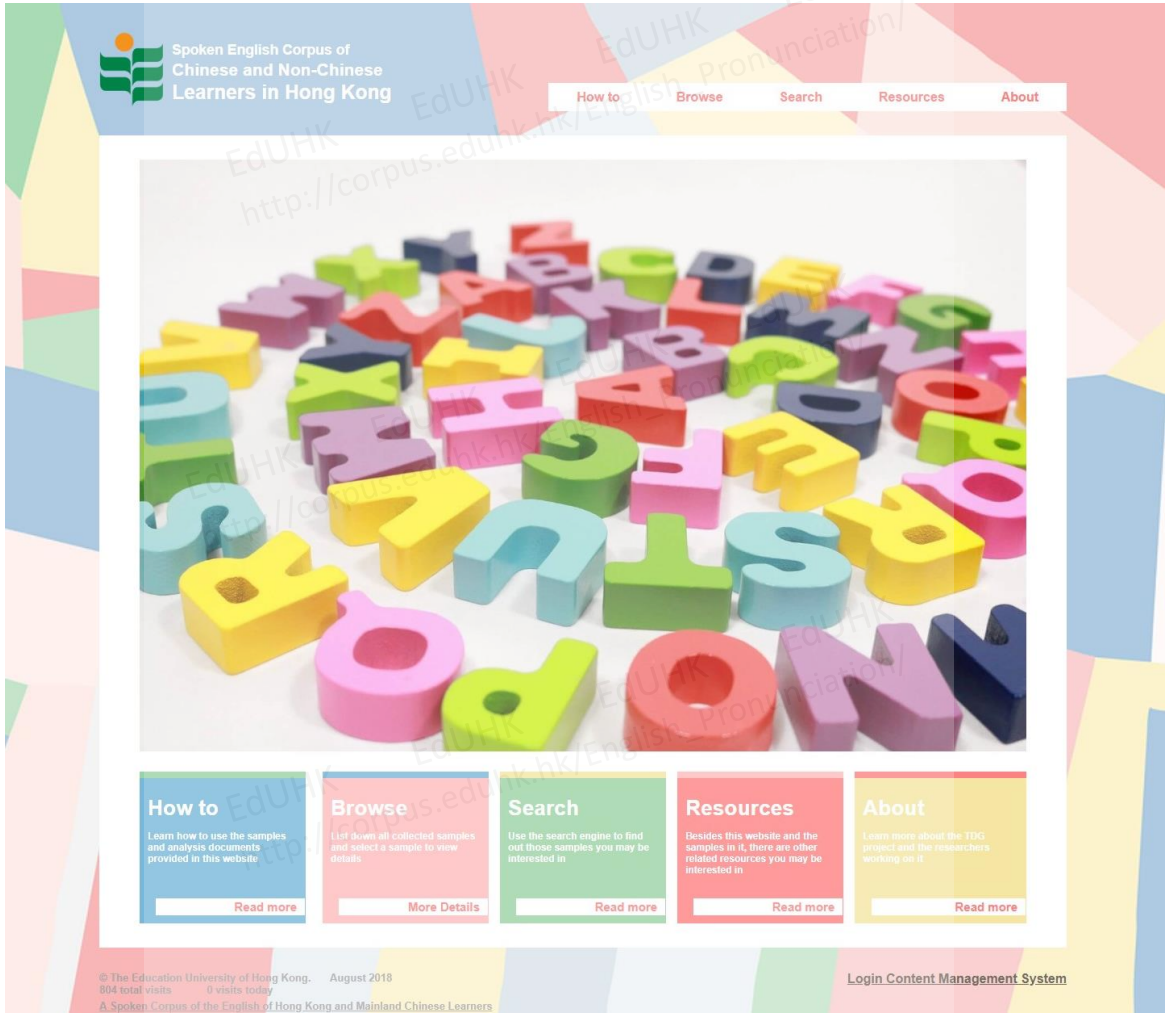
Our New Corpus



- over ***140*** sets of high-quality recordings, including reading of sentences, passages, and individual interviews;
- identifies segmental and suprasegmental difficulties in learning English pronunciation by learners from ***Hong Kong***, ***different dialectal regions of mainland China***, **and** ***South Asia***.

Principles and Issues about PRON Teaching and Learning

1. What is the goal of pronunciation teaching and learning?

2. Which pronunciation features are important to teach?

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Overview of Phonics, Phonetics & Phonology

- ***phone*** *= sound*
- ***phoneme*** *= the smallest unit of sound*

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Overview of Phonics, Phonetics & Phonology

- ***phonics*** *= decoding and encoding of sounds into graphemes (letters);*

letter-sound relationship

- ***phonetics*** *= the study of ways human make, transmit, and receive speech sounds;*

description of how speech sounds are made (of any language)

- ***phonology*** *= the study of the sound systems of languages, and of the general properties displayed by these systems.*

how speech sounds of a language pattern together according to regular rules (of a particular language)

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The English SOUND System

The Segmental System

phonemes
→consonants & vowels
(including diphthongs)

+

The S mental System

linking the segments / phonemes
→syllables, stress and rhythm, intonation …

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The English SOUND System

The Segmental System

phonemes

→consonants & vowels (including diphthongs)

+

The Suprasegmental System

linking the segments / phonemes

→syllables, stress and rhythm, intonation …

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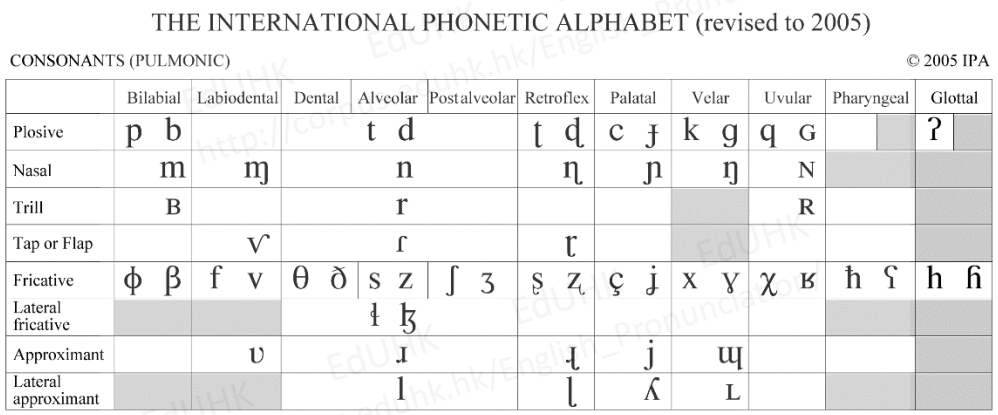
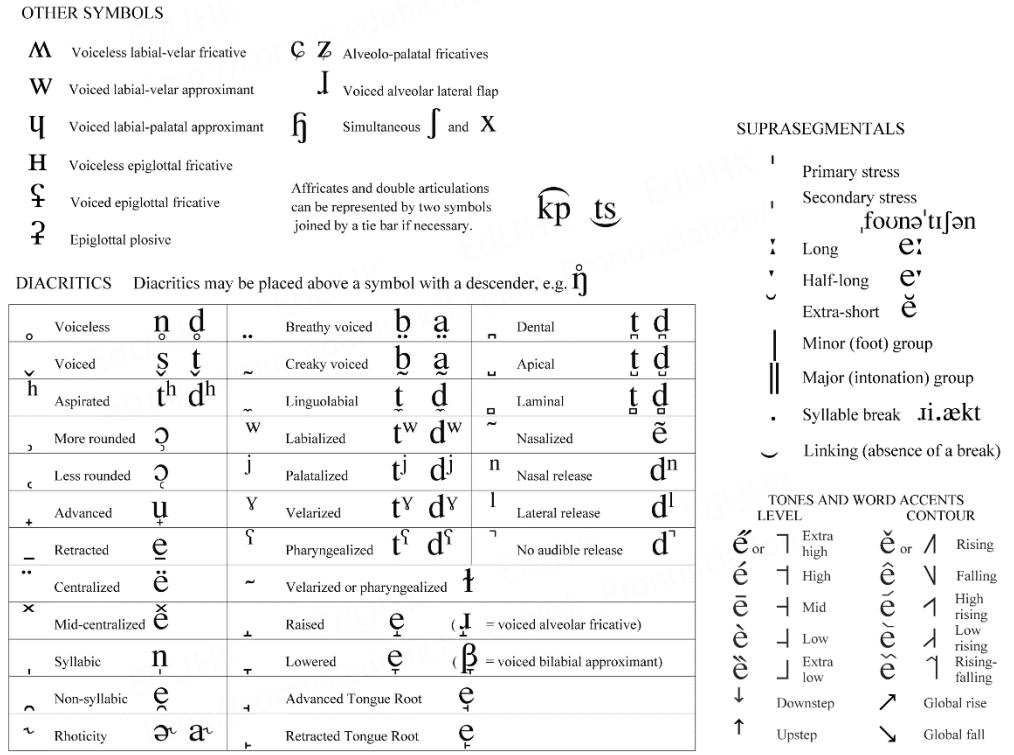
The International Phonetic Alphabet (IPA)





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The International Phonetic Alphabet (IPA)

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC) © 2005 IPA

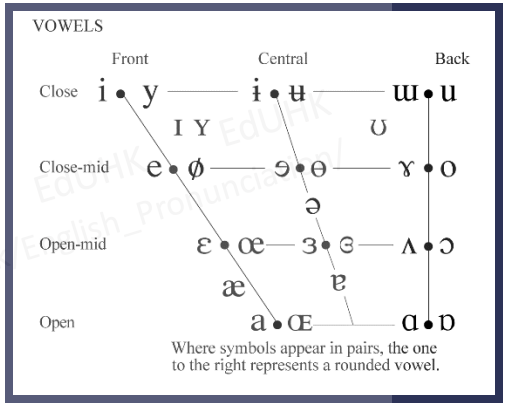
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k g	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks		Voiced implosives		Ejectives	
ʘ	Bilabial	ɓ	Bilabial	’	Examples:
|	Dental	ɗ	Dental/alveolar	pʼ	Bilabial
!	(Post)alveolar	ʄ	Palatal	tʼ	Dental/alveolar
ǂ	Palatoalveolar	ɠ	Velar	kʼ	Velar
‖	Alveolar lateral	ʛ	Uvular	sʼ	Alveolar fricative

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

OTHER SYMBOLS

ʍ	Voiceless labial-velar fricative	ɕ ʑ	Alveolo-palatal fricatives
w	Voiced labial-velar approximant	ɺ	Voiced alveolar lateral flap
ɥ	Voiced labial-palatal approximant	ʢ	Simultaneous ʃ and x
ʜ	Voiceless epiglottal fricative		
ʡ	Voiced epiglottal fricative		
ʡ	Epiglottal plosive		

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary. k͡p t͡s

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. ŋ̊

◌̥	Voiceless	n̥ d̥	◌̤	Breathy voiced	b̤ a̤	◌̪	Dental	t̪ d̪
◌̬	Voiced	s̬ t̬	◌̰	Creaky voiced	b̰ a̰	◌̺	Apical	t̺ d̺
◌ʰ	Aspirated	tʰ dʰ	◌̼	Linguolabial	t̼ d̼	◌̻	Laminal	t̻ d̻
◌̹	More rounded	ɔ̹	◌ʷ	Labialized	tʷ dʷ	◌̃	Nasalized	ẽ
◌̜	Less rounded	ɔ̜	◌ʲ	Palatalized	tʲ dʲ	◌ⁿ	Nasal release	dⁿ
◌̟	Advanced	u̟	◌ˠ	Velarized	tˠ dˠ	◌ˡ	Lateral release	dˡ
◌̠	Retracted	e̠	◌ˤ	Pharyngealized	tˤ dˤ	◌̚	No audible release	d̚
◌̈	Centralized	ë	◌̴	Velarized or pharyngealized	ɫ			
◌̽	Mid-centralized	e̽	◌̝	Raised	e̝	(ɹ̝ = voiced alveolar fricative)		
◌̩	Syllabic	n̩	◌̞	Lowered	e̞	(β̞ = voiced bilabial approximant)		
◌̯	Non-syllabic	e̯	◌̘	Advanced Tongue Root	e̘			
◌˞	Rhoticity	ə˞ a˞	◌̙	Retracted Tongue Root	e̙			

SUPRASEGMENTALS

ˈ	Primary stress	ˌfoʊnəˈtɪʃən	
ˌ	Secondary stress		
ː	Long	eː	
ˑ	Half-long	eˑ	
◌̆	Extra-short	ĕ	
|	Minor (foot) group		
‖	Major (intonation) group		
.	Syllable break	ɹi.ækt	
‿	Linking (absence of a break)		

TONES AND WORD ACCENTS

LEVEL			CONTOUR	
e̋ or ˥	Extra high		ě or ˩˥	Rising
é ˦	High		ê ˥˩	Falling
ē ˧	Mid		e᷄ ˧˥	High rising
è ˨	Low		e᷅ ˨˩	Low rising
ȅ ˩	Extra low		e᷈ ˩˥˧	Rising-falling
↓	Downstep		↗	Global rise
↑	Upstep		↘	Global fall

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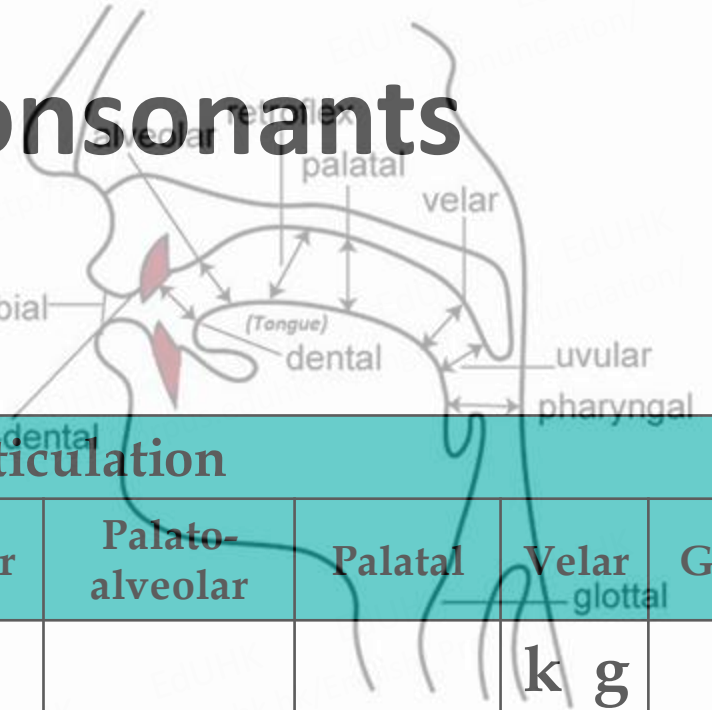
The Segmental System – Consonants

Consonant Chart : 24 phonemes



Manner of articulation	Place of articulation							
	Bilabial	Labiodental	Dental	Alveolar	Palato-alveolar	Palatal	Velar	Glottal
Plosive	p b			t d			k g	
Fricative		f v	θ ð	s z	ʃ ʒ			h
Affricate					tʃ dʒ			
Nasal	m			n			ŋ	
Lateral				l				
Approximant	w				r	j		

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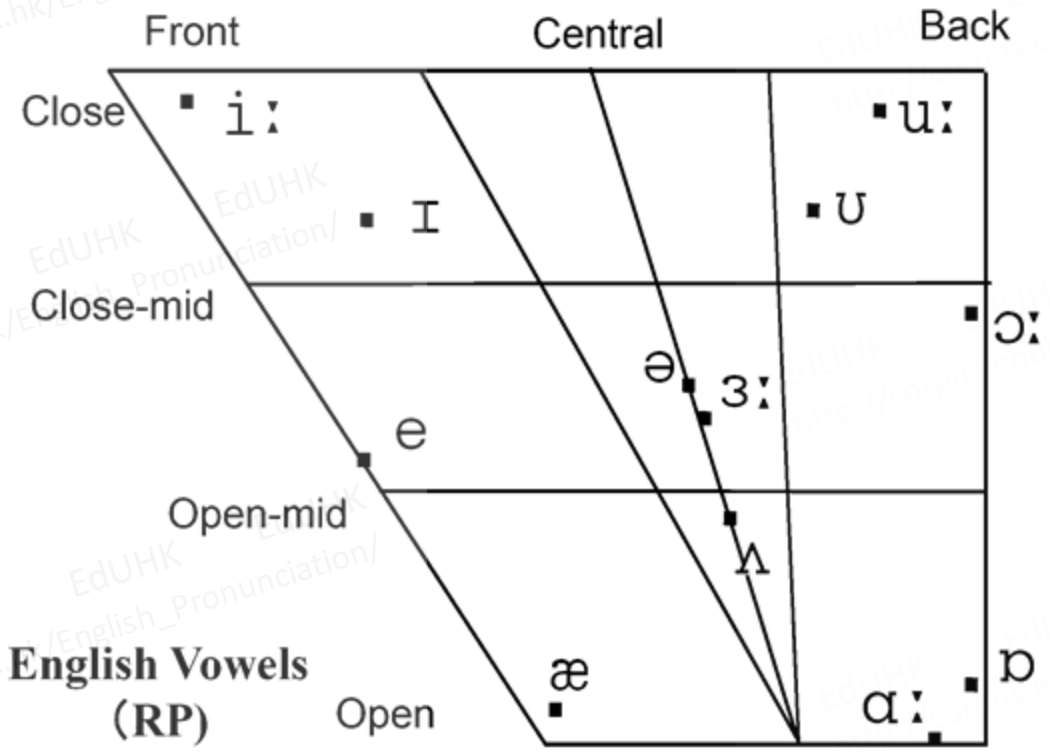
The Segmental System – Vowels

Articulation of vowels



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The Segmental System

????

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English Phonemic Chart

Vowels	iː	ɪ	ʊ	uː	ɪə	eɪ	*Diphthongs*	
	e	ə	ɜː	ɔː	ʊə	ɔɪ	əʊ	
	æ	ʌ	ɑː	ɒ	eə	aɪ	aʊ	
Consonants	p	f	t	θ	ʧ	s	ʃ	k
	b	v	d	ð	ʤ	z	ʒ	g
	h	m	n	ŋ	r	l	w	j

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Principles and Issues about PRON Teaching and Learning

1. What is the goal of pronunciation teaching and learning?

2. Which pronunciation features are important to teach?

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Goal of PRON Teaching/Learning

to achieve
a '**comfortably intelligible**'
accent

(Kenworthy1991; Pennington 1996; Ur 2000; Hewing 2004)

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What features are important?

Task A

Please fill in the blanks to complete IPA transcription of the English words.

No.	English	IPA	No.	English	IPA
1	even	_ vn	2	feast	f _ st
3	fist	f _ st	4	convinced	k _ nv _ ns_
5	pleasure	pl _ _ə	6	successful	s _ ks _ sf _ _
7	exactly	ɪ _ _ _ ktli	8	actually	_ k _ u _ li
9	company	k _ mp _ ni	10	fun	f _ n
11	duck	d _ k	12	dark	d _ k
13	cousins	k_ _ ən _	14	flocks	fl _ k _
15	thought	_ _ t	16	unfortunately	_ _ f _ tʃən _ tli
17	foot	f _ t	18	fool	f _ _
19	concern	k _ ns _ n	20	bother	b _ _ ə

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What features are important?

Task A

No.	English	IPA	No.	English	IPA
1	even	/ˈiː.vən/	2	feast	/fiːst/
3	fist	/fɪst/	4	convinced	/kənˈvɪnst/
5	pleasure	/ˈpleʒ.ər/	6	successful	/səkˈses.fəl/
7	exactly	/ɪgˈzækt.li/	8	actually	/ˈæk.tʃu.ə.li/
9	company	/ˈkʌm.pə.ni/	10	fun	/fʌn/
11	duck	/dʌk/	12	dark	/dɑːk/
13	cousins	/ˈkʌz.ənz/	14	flocks	/flɒks/
15	thought	/θɔːt/	16	unfortunately	/ʌnˈfɔː.tʃən.ət.li/
17	foot	/fʊt/	18	fool	/fuːl/
19	concern	/kənˈsɜːn/	20	bother	/ˈbɒð.əʳ/

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What features are important?

Errors that are most likely to interfere with communication

(Hewing 2004, p.15)

01 **Consonants**

Replacing one consonant with another often leads to misunderstanding

e.g. **think → sink, light → night, pleasure → pressure**

02 **Consonant clusters –2 major problems**

a. *Deleting* consonants from an initial cluster

e.g. **floor → four, plan → pan**

b. Adding *vowels* within a cluster

e.g. **tips → tipsi, Stella → Sitella**

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Some Important Segmental Features..

Errors that are most likely to interfere with communication

(Hewing 2004, p.15)

03

Vowel length

The most common problem is confusion between vowels, e.g. **beat vs bit, short vs shot**

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Exploitation of our new corpus…

Our Corpus-aided English Pronunciation Teaching and Learning System

About the Project

This project aims to develop a corpus-based training program to help teachers, learners and researchers have a better understanding of the major problems in learning English pronunciation by Hong Kong, Mainland and Southeast Asian learners in Hong Kong.

A spoken corpus of Chinese and non-Chinese students has been established and analyzed in order to

(a) identify Chinese and non-Chinese students' recurrent difficulties in English pronunciation learning; and

(b) suggest possible remedies that may reduce or eliminate such difficulties.

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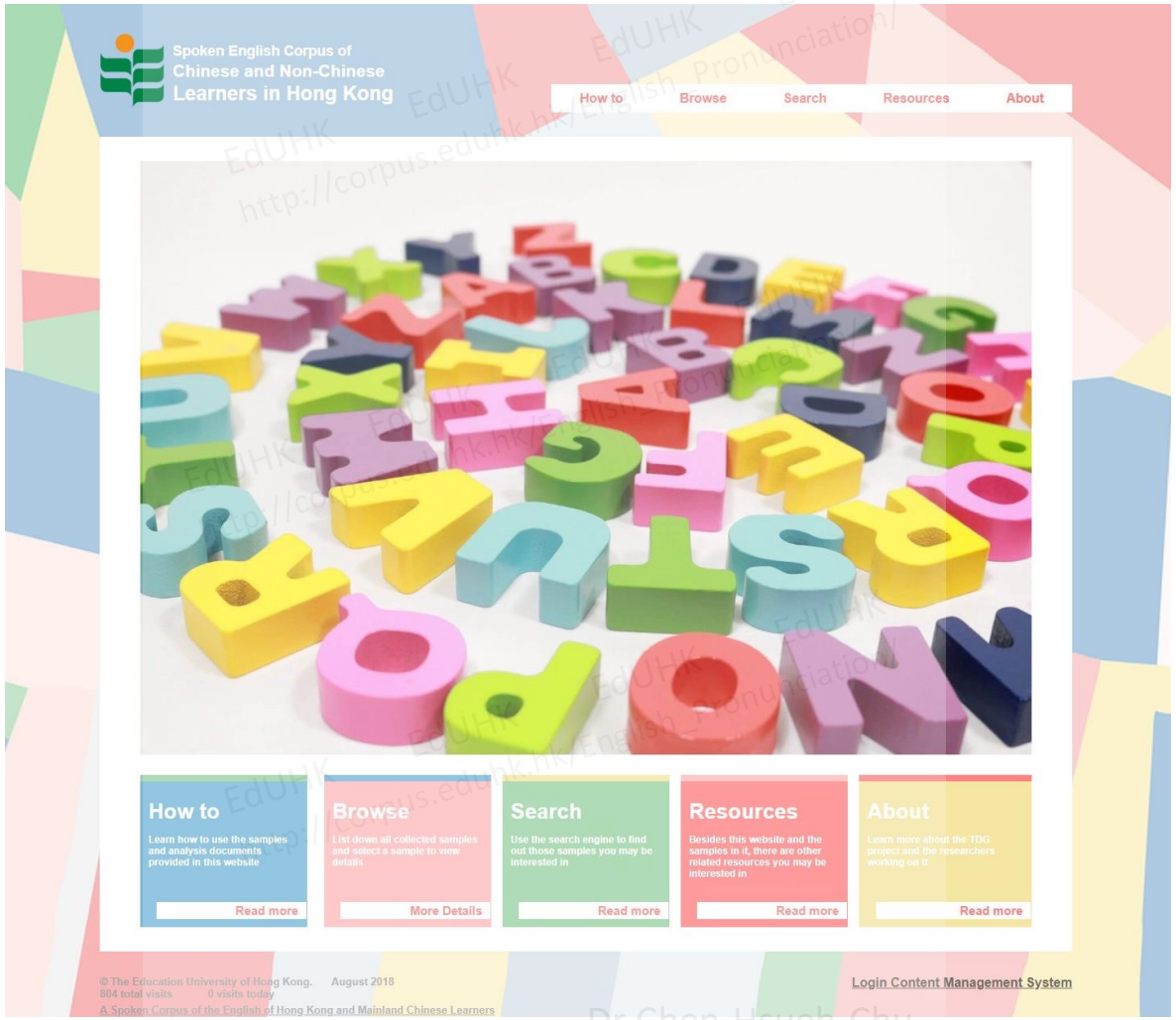
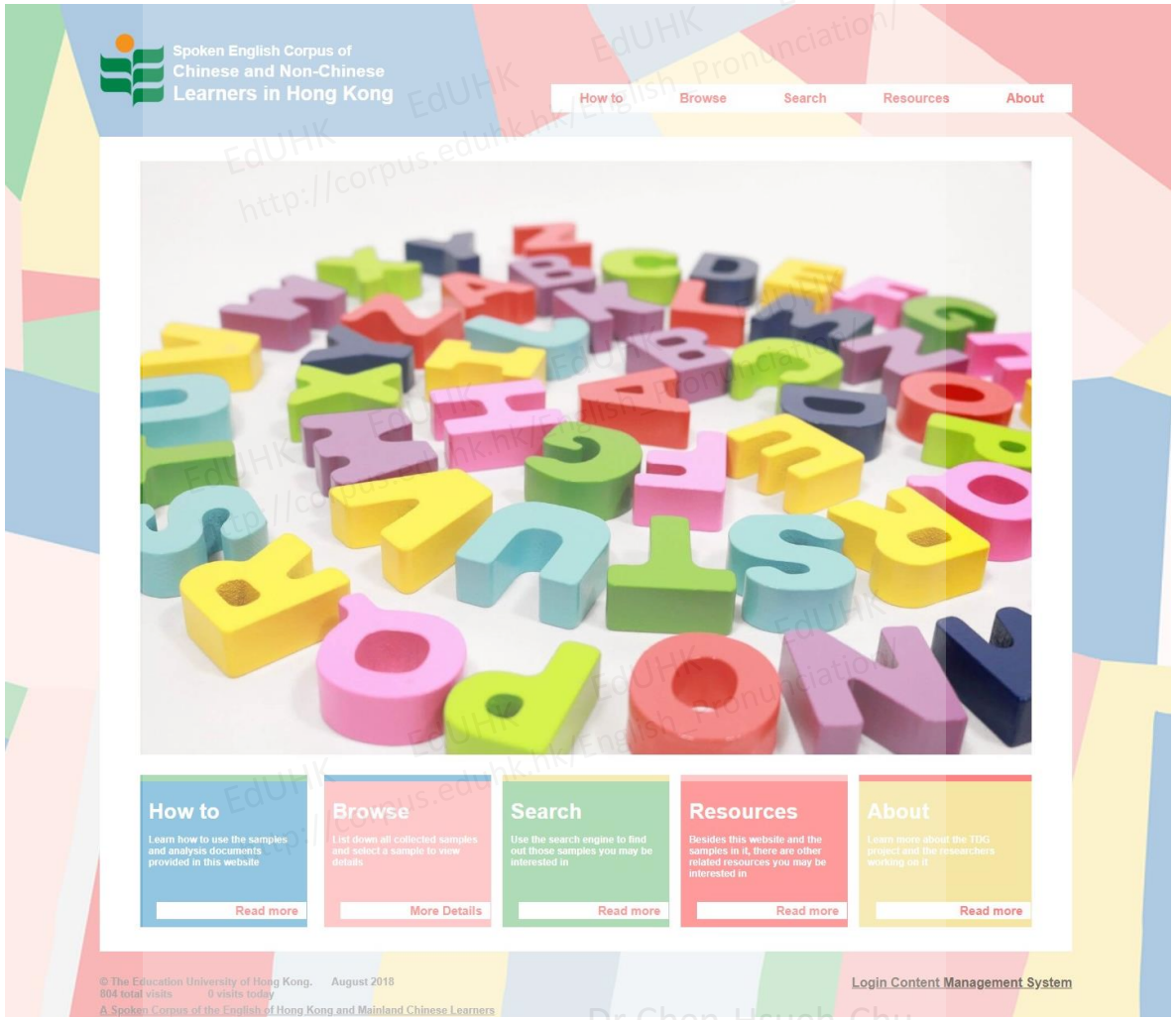
Our Corpus-aided English Pronunciation Teaching and Learning System

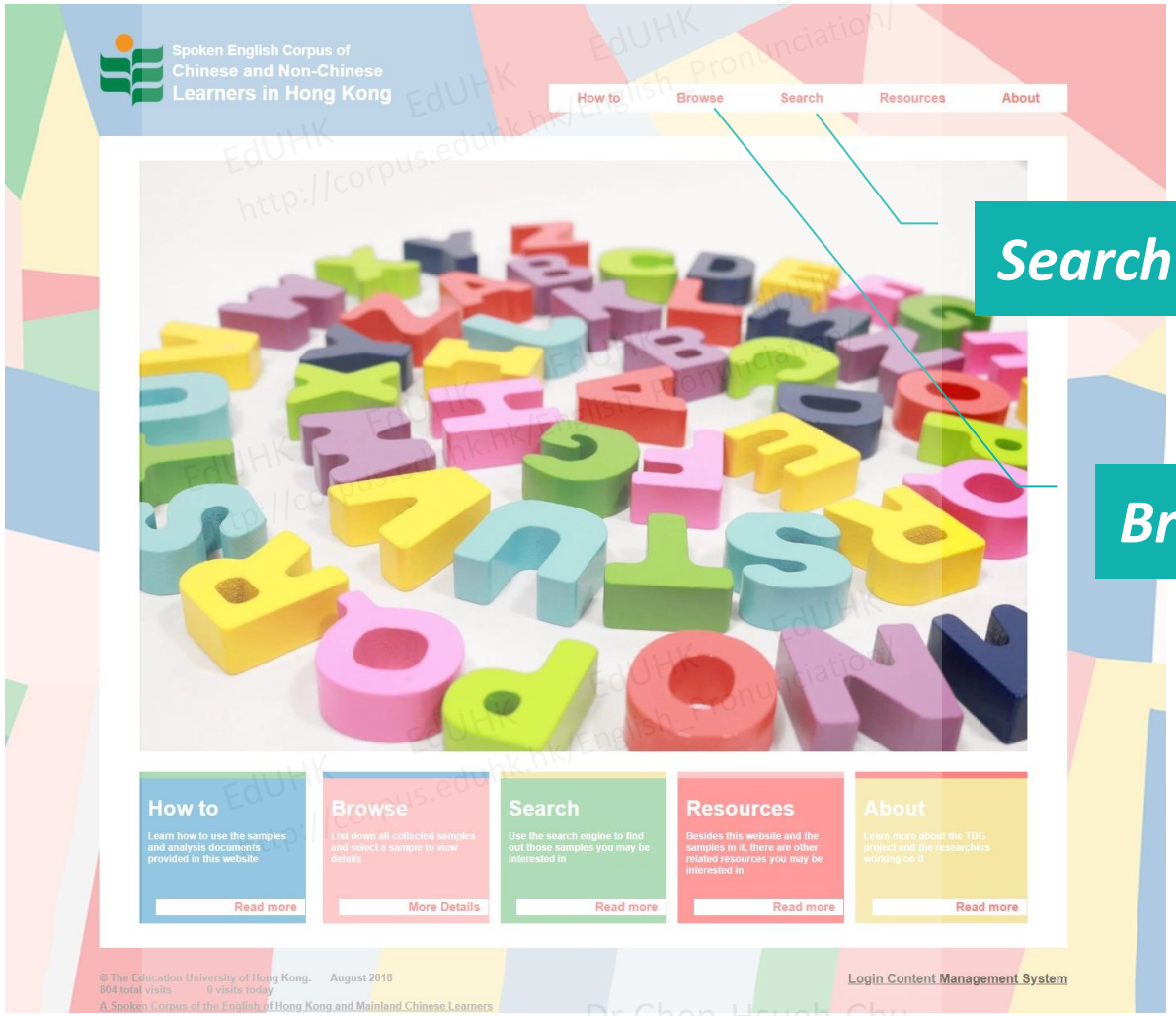


Exploitation of our new corpus…



- This corpus provides both ***authentic speech data*** and ***annotation of frequently-occurred English pronunciation features***.
- You can use the corpus to ***discover and generalize the rules and patterns of English pronunciation*** by observing the large amount of authentic speech data with scientific description of the features in the corpus.

Exploitation of our new corpus…



Search function

Browse function

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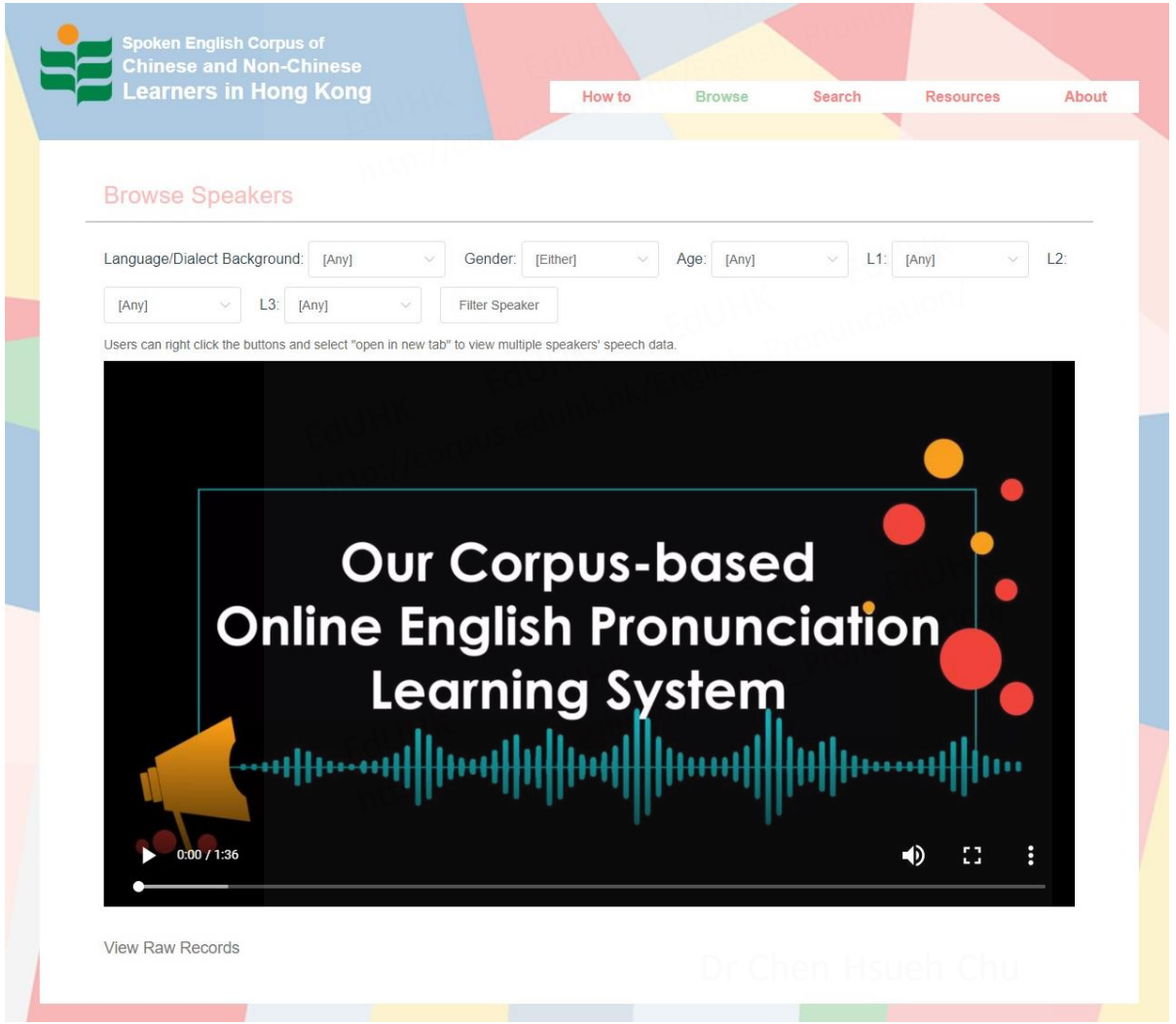
Our Spoken English Corpus

Browse function



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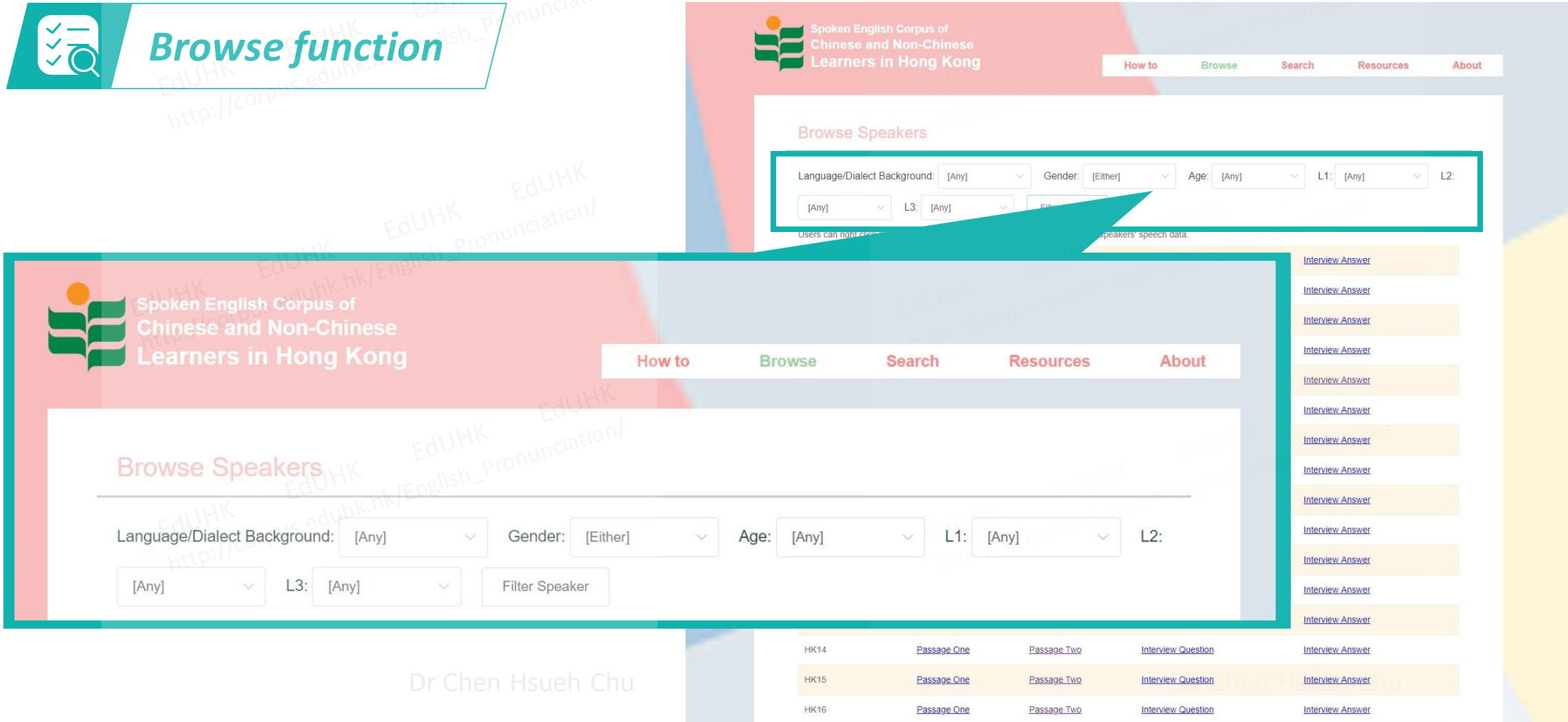
Our Spoken English Corpus

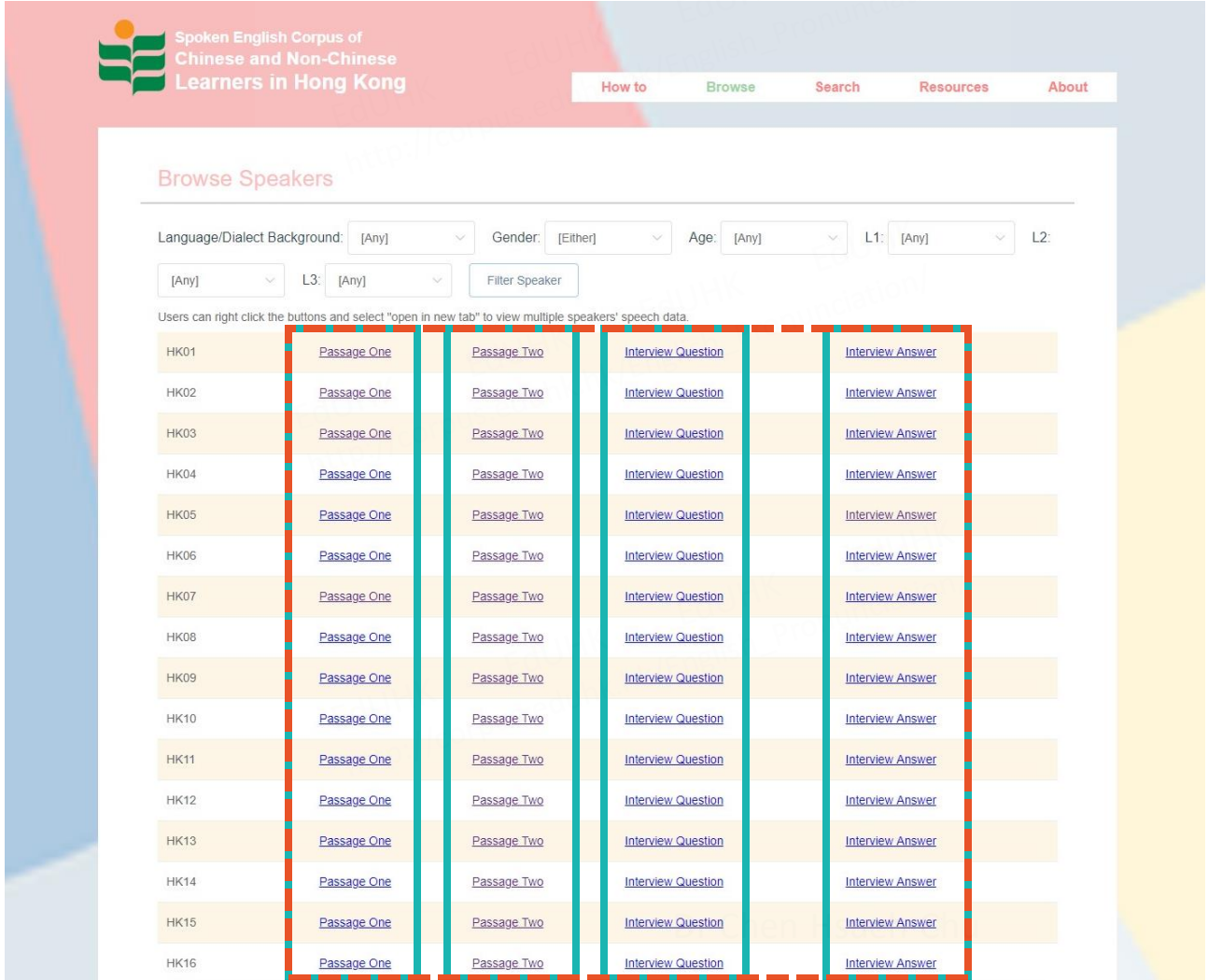
Browse function



Our Spoken English Corpus

Browse function

- sentence reading with graphic illustration for ***suprasegmental features***
- the reading of the passage ‘the boy who cried wolf’ with ***segmental annotation***
- interview questions and answers with ***audio recordings and transcripts***



Our Spoken English Corpus – *Browse Function*

Passage One

Speaker: HK01

Hometown: Hong Kong	**Gender:** female	**Age:** 21	**Education Level:** Bachelor	**Major:** Chinese
English Level: HKAL Level D	**Year of Learning English:** 15	**L1:** Cantonese	**L2:** Mandarin	**L3:** English

Notes: "HK", "ML" and "SA" in the speaker's name stand for "Hong Kong", "Mainland" and "South and Southeast Asia" respectively.

Remarks:

1. The blue contour in pictures is pitch contour to indicate the intonation (pitch).
2. The yellow contour in pictures is intensity contour to indicate the intensity of the speech.
3. The suprasegmental features that have been spotted. Please tick the boxes to show features.
   - ☐ Inappropriate pausing(IP)
   - ☐ Absence of CV linking(AL)
   - ☐ Inappropriate lexical stress(ILS)
   - ☐ Inappropriate intonation(II)

Full Passage Recording: ▶ 0:00

Marking Scheme of Passage 1

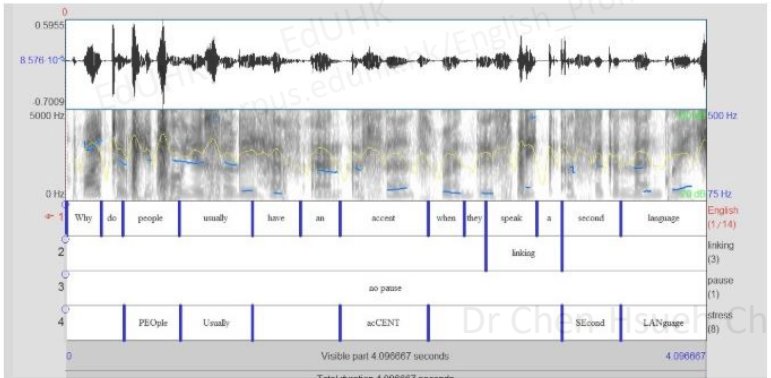
Sentence 1:

Speaker's Recording: ▶ 0:00 / 0:04

US Sample: ▶ 0:00 / 0:03

UK Sample: ▶ 0:00 / 0:04

Why do PEOple Usually have an acCENT when they speak a SEcond LANguage?



Passage Two

Speaker: HK01

Hometown: Hong Kong	**Gender:** female	**Age:** 21	**Education Level:** Bachelor	**Major:** Chinese
English Level: HKAL Level D	**Year of Learning English:** 15	**L1:** Cantonese	**L2:** Mandarin	**L3:** English

Notes: "HK", "ML" and "SA" in the speaker's name stand for "Hong Kong", "Mainland" and "South and Southeast Asia" respectively.

Marking Scheme of Passage 2

Speaker's Record:

Speaker's Recording: ▶ 0:00

US Sample: ▶ 0:00 / 1:29

UK Sample: ▶ 0:00 / 1:18

Segment 1:

Speaker's Recording: ▶ 0:00 / 0:24

US Sample: ▶ 0:00 / 0:21

UK Sample: ▶ 0:00 / 0:17

The (/ ð /->/ d /) Boy who Cried Wolf (omission of / l /)
There(/ ð /->/ d /) was once a poor shepherd (mispronunciation) boy who used to watch (insertion of / d /) his flocks in the fields (mispronunciation) next to a dark (omission of / k /) forest near the foot of a mountain (/aʊ/->/ɑː/). One hot afternoon, he thought (/ θ /->/ f /) up a good plan to get some company for himself(omission of / f /) and also(omission of / l /) have a little (/ l /->/əʊ/) fun.

Segment 2:

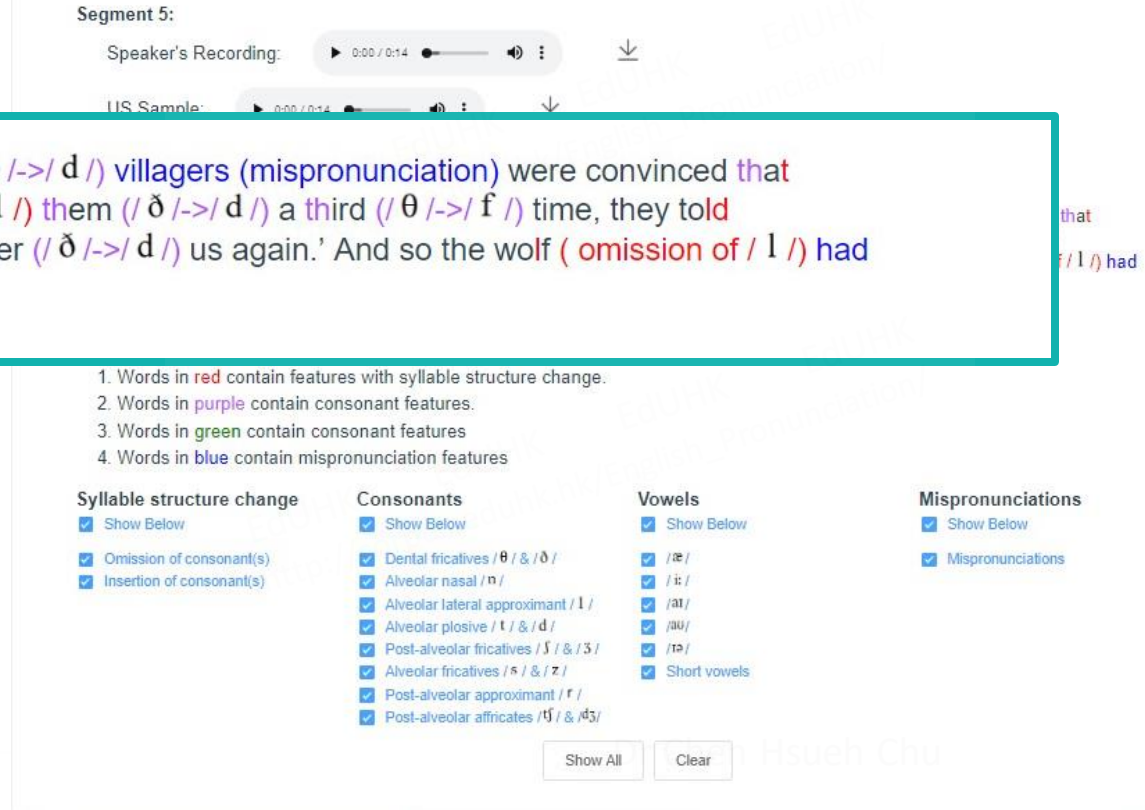
Speaker's Recording: ▶ 0:00 / 0:18

US Sample: ▶ 0:00 / 0:16

UK Sample: ▶ 0:00 / 0:15

Raising (/ r /->/ w /) his fist in the (/ ð /->/ d /) air, he ran down to the (/ ð /->/ d /) village shouting (/ ʃ /->/ s /) 'Wolf (omission of / l /), wolf (omission of / l /).' As soon as they heard (/ d /->/ t /) him, the villagers all (omission of / l /) rushed (/ r /->/ w /) from their homes, full (omission of / l /) of concern for his safety, and two of his cousins even stayed (omission of / d /) with(/ ð /->/ f /) him for a short(/ ʃ /->/ s /) while.

Our Spoken English Corpus – *Browse Function*



Our Spoken English Corpus – *Browse Function*

Interview Question

Speaker: ML96

Hometown: Jiangxi (Shangrao) / Kan Dialect **Gender:** female **Age:** 19 **Education Level:** Bachelor **Major:** Education Technology
English Level: CET-6 Overall 490 **Year of Learning English:** 6 **L1:** Mandarin **L2:** English **L3:** (N/A)

Notes: "HK", "ML" and "SA" in the speaker's name stand for "Hong Kong", "Mainland" and "South and Southeast Asia" respectively.

Speaker's Recording: 0:00 / 1:29

1. So tell me something about your family. How many people are in your family?
2. What's does your mother and your father do? What, what do your mother and your father do?
3. Okay, so what's your favorite activity to do with your family?
4. Um... so how would you, how would your family spend a typi- typical day together?
5. Okay, so what's the most (important) thing you learned from your parents?
6. Okay, so next question, what do to do, er, what do you like to do in your free time?
7. Er... so what type of book do you to do you like most?
8. Er, can you recommend some books you like?
9. OK, what did you do last weekend?
10. OK, do you like travelling?
11. What do you find interesting about travelling?
12. Hmm. So what's the best holiday you have ever had?
13. Have you ever been abroad?
14. Where have you been?
15. Which place do you like most among the place you have been?
16. Do you like travelling with your family or travelling with your friend? Which?

Interview Answer

Speaker: ML96

Hometown: Jiangxi (Shangrao) / Kan Dialect **Gender:** female **Age:** 19 **Education Level:** Bachelor **Major:** Education Technology
English Level: CET-6 Overall 490 **Year of Learning English:** 6 **L1:** Mandarin **L2:** English **L3:** (N/A)

Notes: "HK", "ML" and "SA" in the speaker's name stand for "Hong Kong", "Mainland" and "South and Southeast Asia" respectively.

Remarks:

1. *The sentences in black are from interviewee, the sentences in blue are from the interviewer.*
2. *Use "..." to indicate the fragmented sentences.*
3. *Use "(. . .)" to signify a word or a phrase that you cannot understand after trying several times.*
4. *We put the words that are guessed from the context in the brackets ( ).*

Speaker's Recording: 0:00 / 6:23

[1. Interviewer: Tell me something about your family. First, how many people are there in your family?]
ML96: Um. There are four people in my family, including my parents, my little brother and I.

[2. Interviewer: What does your mother and your father do?]
ML96: Um. Both of my parents are teachers.

[3. Interviewer: Er, what do your little brother do?]
ML96: My little brother is studying in a primary school, he is a student.

[4. Interviewer: Er, what is your favorite activity to do with your family?]
ML96: I like to take a walk after dinner with my family, in my point of view, it's one of the most healthy and warm way that um connect family member to my family.

[5. Interviewer: Hmm. How would your family spend a typical day together?]
ML96: Um. Usually we will eat something delicious, er and sometimes we will go to, er we will go to hiking and, or watching a movie.

[6. Interviewer: What's the most important thing you've learnt from your parents?]
ML96: Um. Insists, andcontent is... "content is happy". Um, in my parents' points of view, only by persistent can make our dreams become a reality, and, only by learn to be satisfied can we lived happy.

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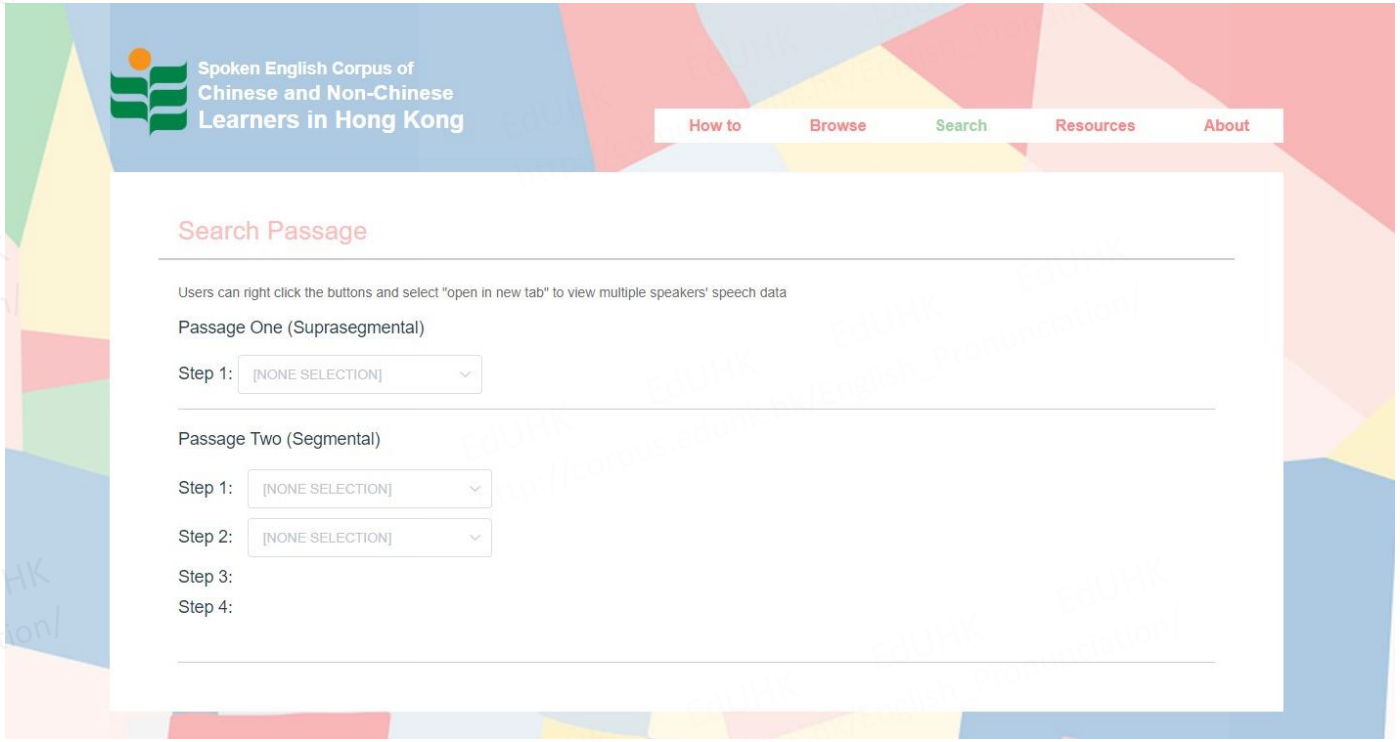
Our Spoken English Corpus

Search function



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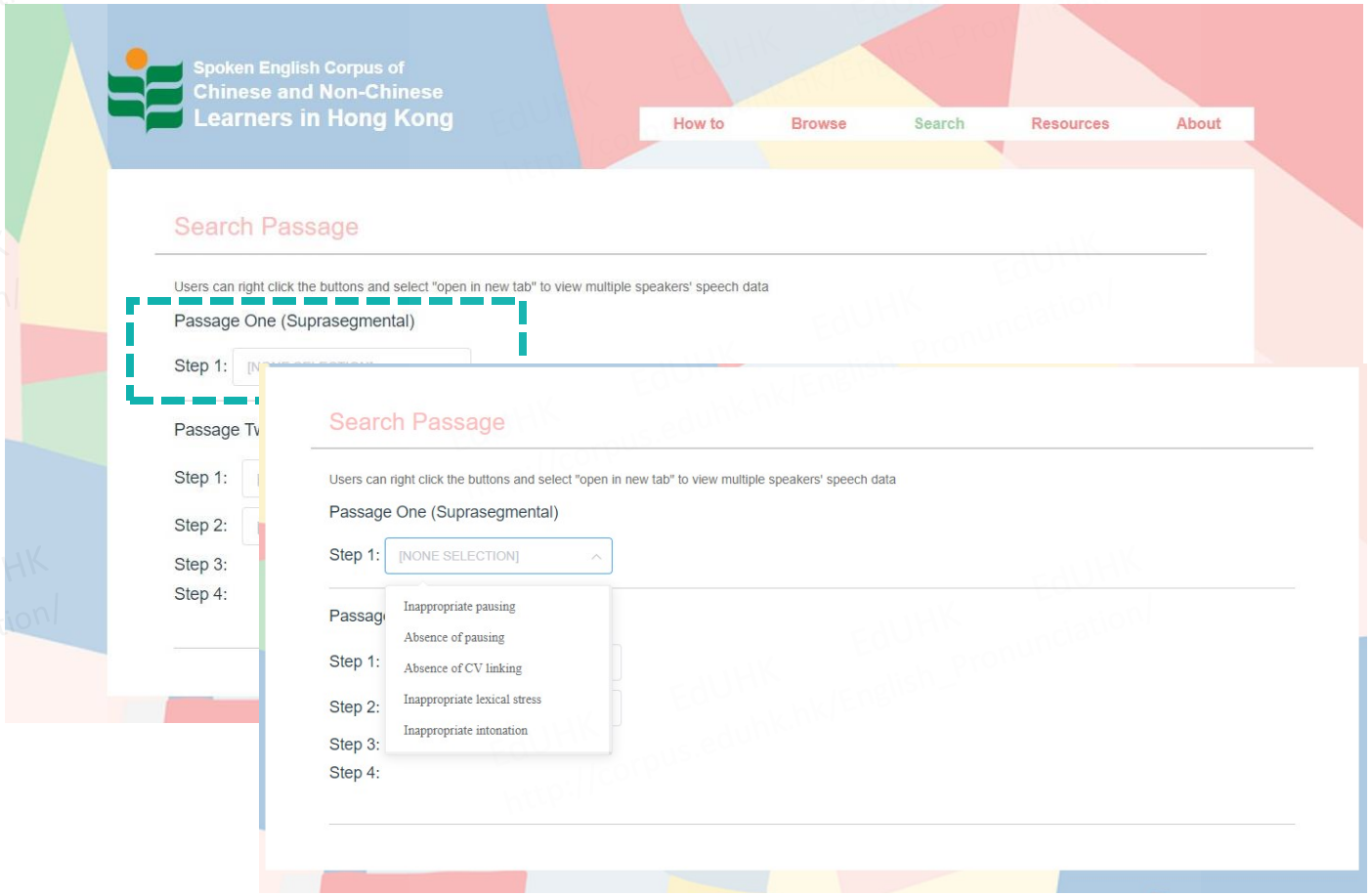

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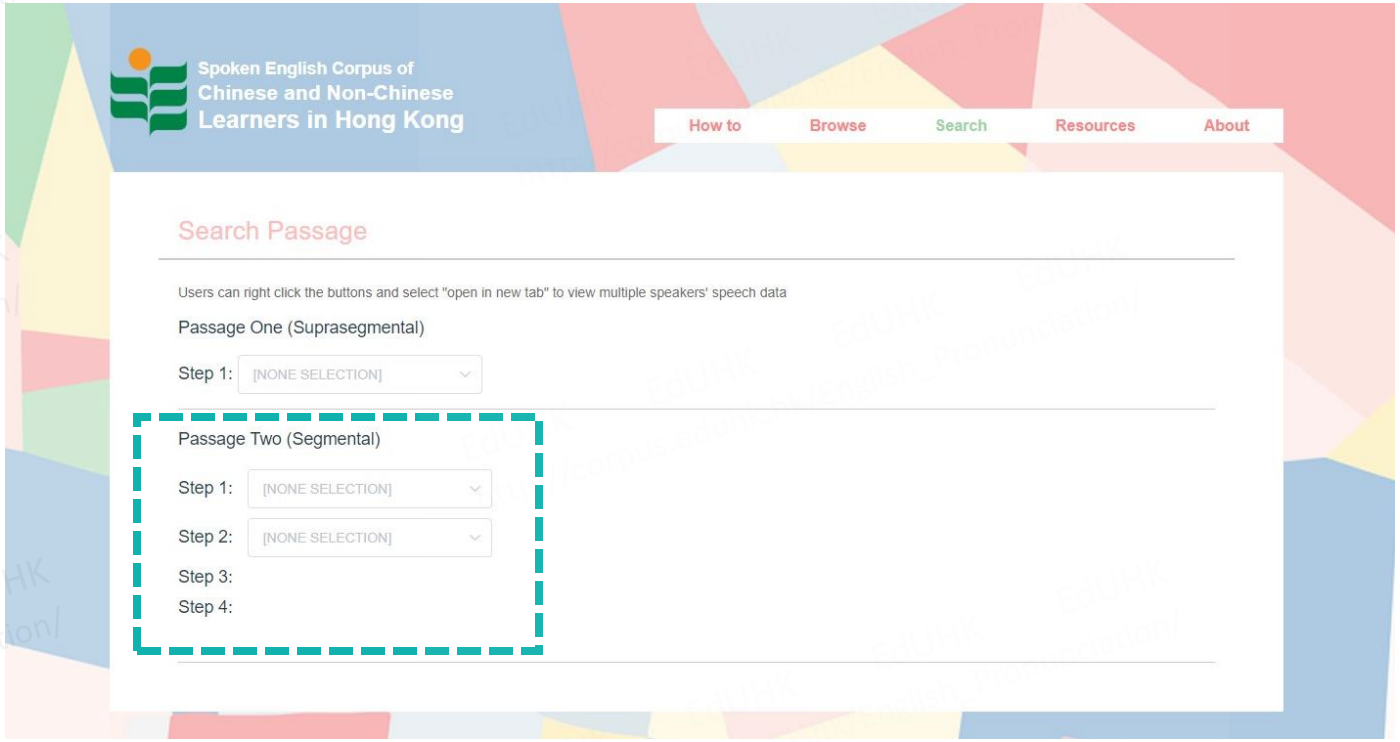
Search function



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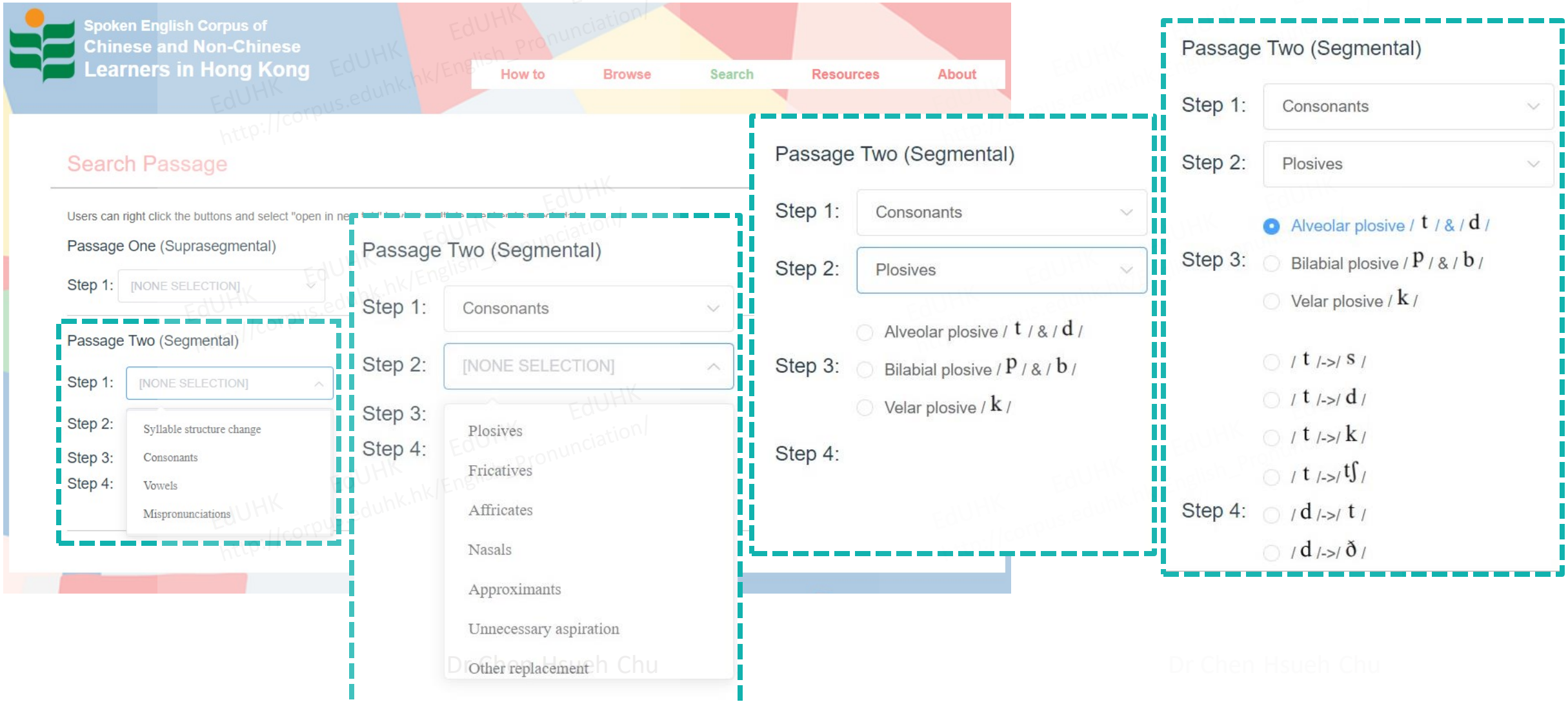
Our Spoken English Corpus – *Search Function*



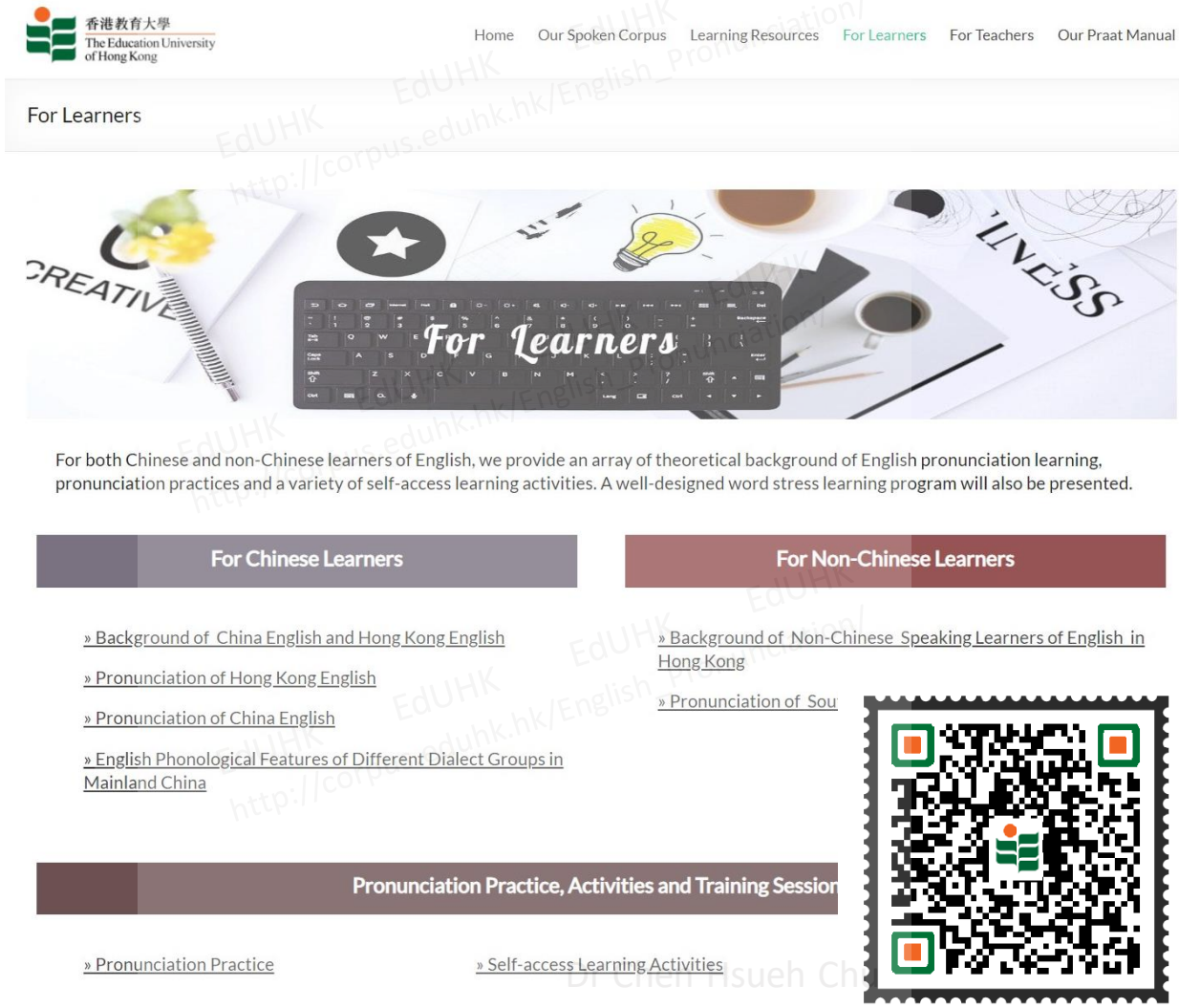
Welcome our next speaker –

Ms Tian Jing Xuan

A doctoral student @ EdUHK

specialized in phonetics, phonology and pronunciation teaching and learning

Our Corpus-aided English Pronunciation Teaching and Learning System



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For Learners

01

Pronunciation Features of Hong Kong English (Cantonese speakers)

Vowels and Diphthongs
1. Absence of contrasts between long and short vowels
e.g. *'bead'* (/biːd/)→ *'bid'*(/bɪd/) *or vice versa*

English Pronunciation of Cantonese speakers

For both Chinese and non-Chinese learners of English, we provide an array of theo
pronunciation practices and a variety of self-access learning activities. A well-desig

For Chinese Learners

» Background of China English and Hong Kong English

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Pronunciation Practice, Activities and

» Pronunciation Practice

» Self-access Learning Activi

02

» Pronunciation Feature List of Cantonese speakers

» Comparison of English and Cantonese (Segmentals)

» Comparison of English and Chinese (Suprasegmentals)

03

Exploitation of our new corpus…

Vowel length

The most common problem is confusion between vowels,
e.g. **beat vs bit, short vs shot**

Pronunciation Features of Hong Kong English (Cantonese speakers)

Vowels and Diphthongs
1. Absence of contrasts between long and short vowels e.g. *'bead'* (/biːd/)→ *'bid'* (/bɪd/) *or vice versa*

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Passage Tw

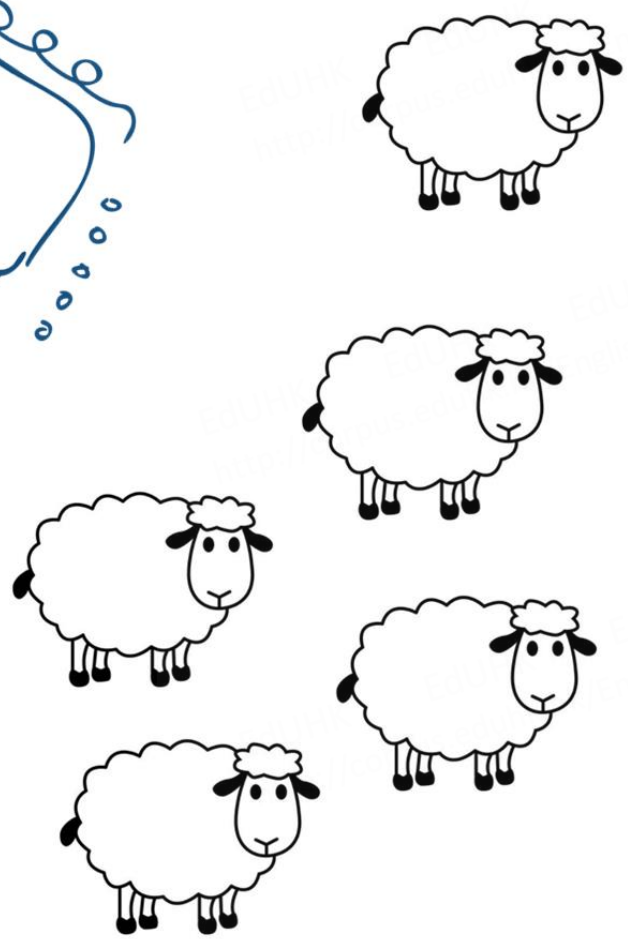
S1: There was o the fields next to a dark forest near the good plan to get some company for him

S2: Raising his fi f.' As soon as they heard him, the villager , and two of his cousins even stayed with

S3: This gave th tly the same trick again, and once more h ust escaped from the zoo was looking for a

S4: So, overcom the forest and began to threaten the she even louder than before.

S5: Unfortunate o fool them a third time, they told him, 'G ast.



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Task B

Please read the following paragraph, predict 4 words that you think Hong Kong learners may easily make errors ***in absence of contrasts between long and short vowels*** in pronunciation, underline the letter or letter combination and write down the error respectively (two for long vowel→short vowel, two for short vowel→long vowel), then scan QR code to get access to and fill out the form.

The Boy Who Cried Wolf

Segment 1

There was once a poor shepherd boy who used to watch his flocks in the fields next to

a dark forest near the foot of a mountain. One hot afternoon, he thought up a good plan

to get some company for himself and also have a little fun.

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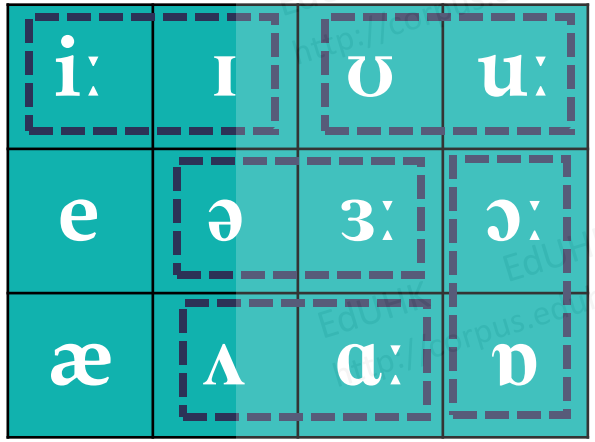
Task B



There was once a poor shepherd boy who used to watch his flocks in the fields next to a dark forest near the foot of a mountain. One hot afternoon, he thought up a good plan to get some company for himself and also have a little fun.

○ *long vowel* ○ *short vowel*

UK *US*

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Exploitation of our new corpus

Task B

long vowel → short vowel

Top 3

There was once a poor shep[illegible] to watch his flocks in the fields next to a dark forest near the foot of a mountain. One hot afternoon, he thought up a good plan to get some company for himself and also have a little fun.

iː	ɪ	ʊ	uː
e	ə	ɜː	ɔː
æ	ʌ	ɑː	ɒ

○ *long vowel* ○ *short vowel*

UK US

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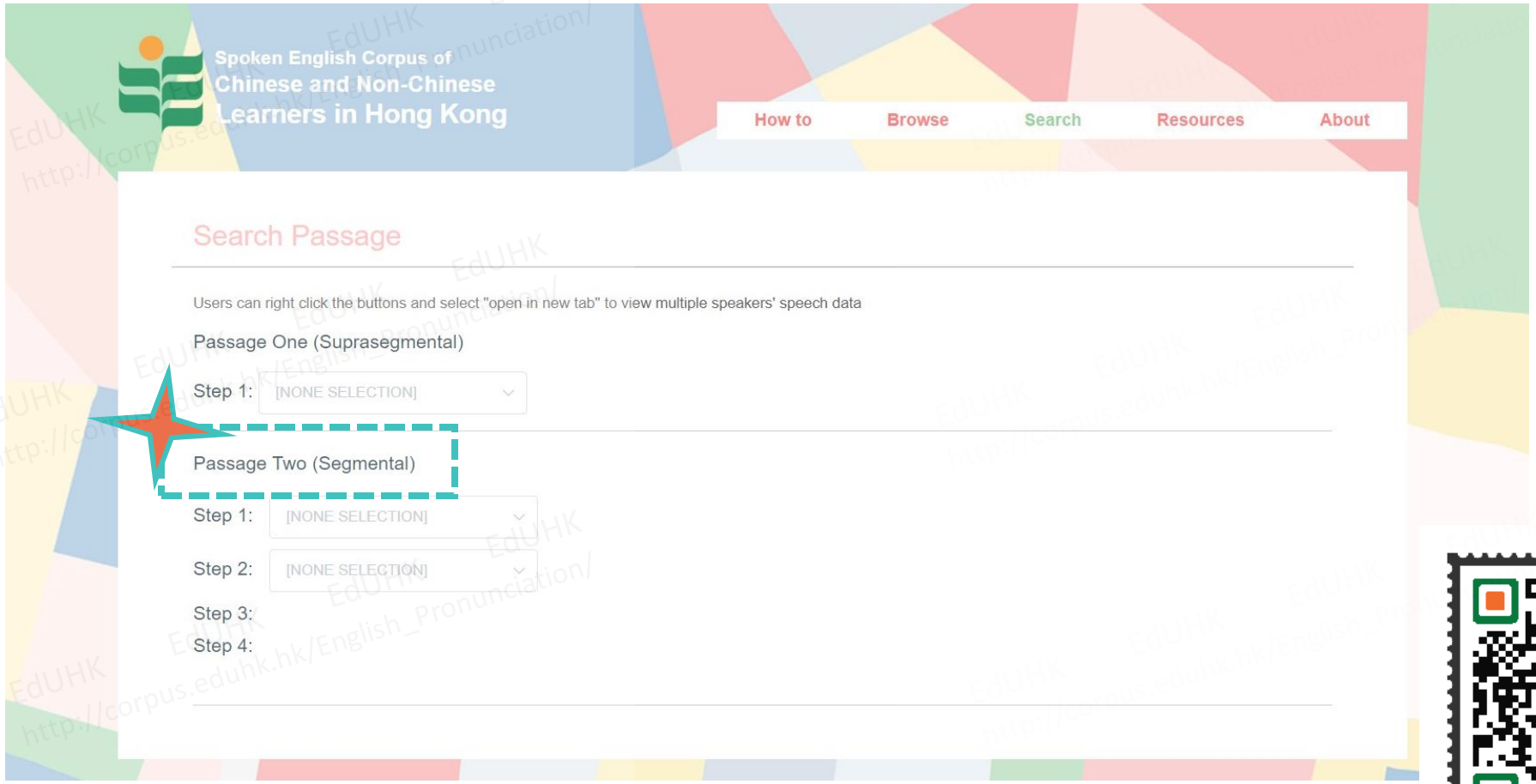

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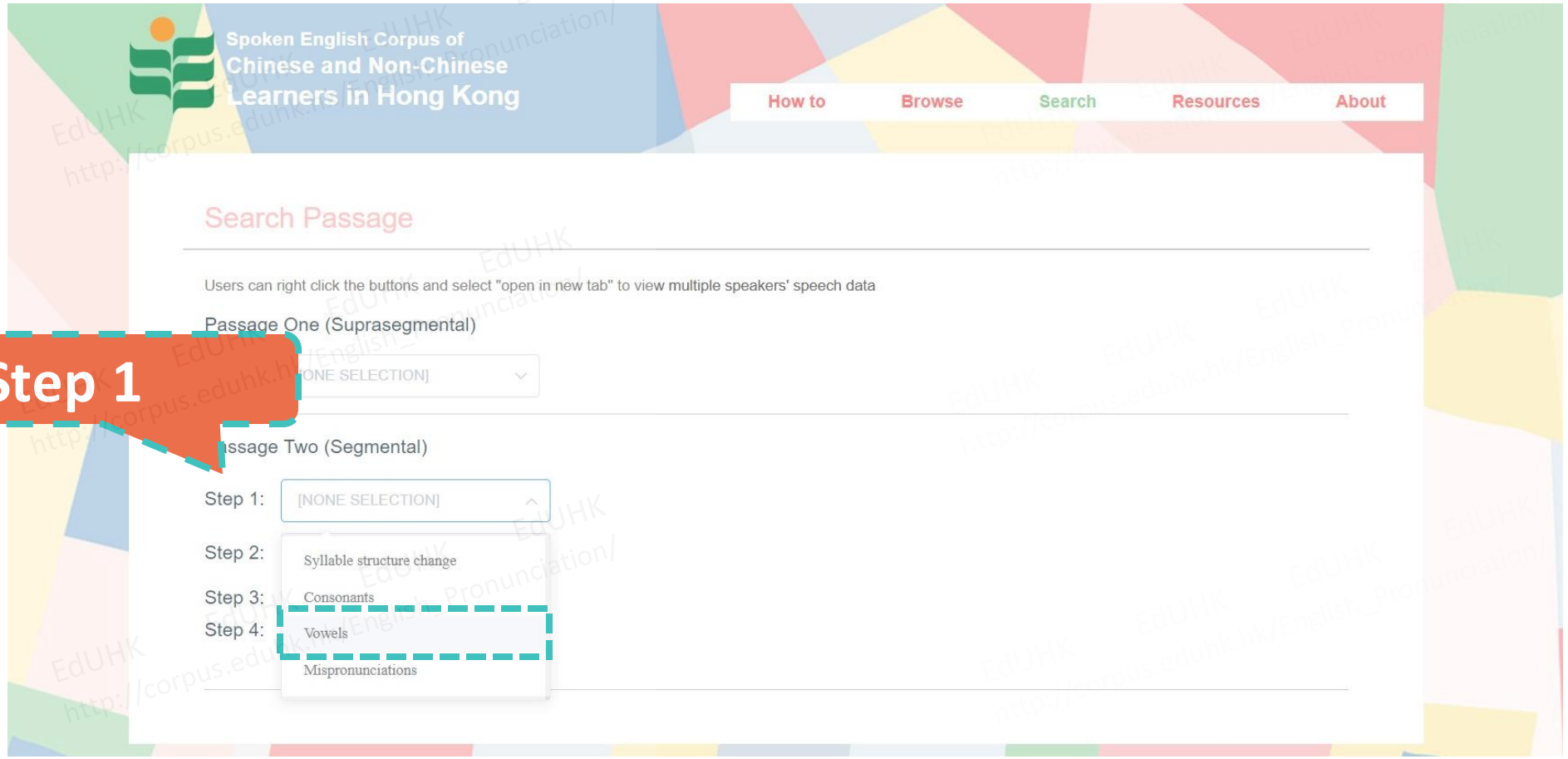

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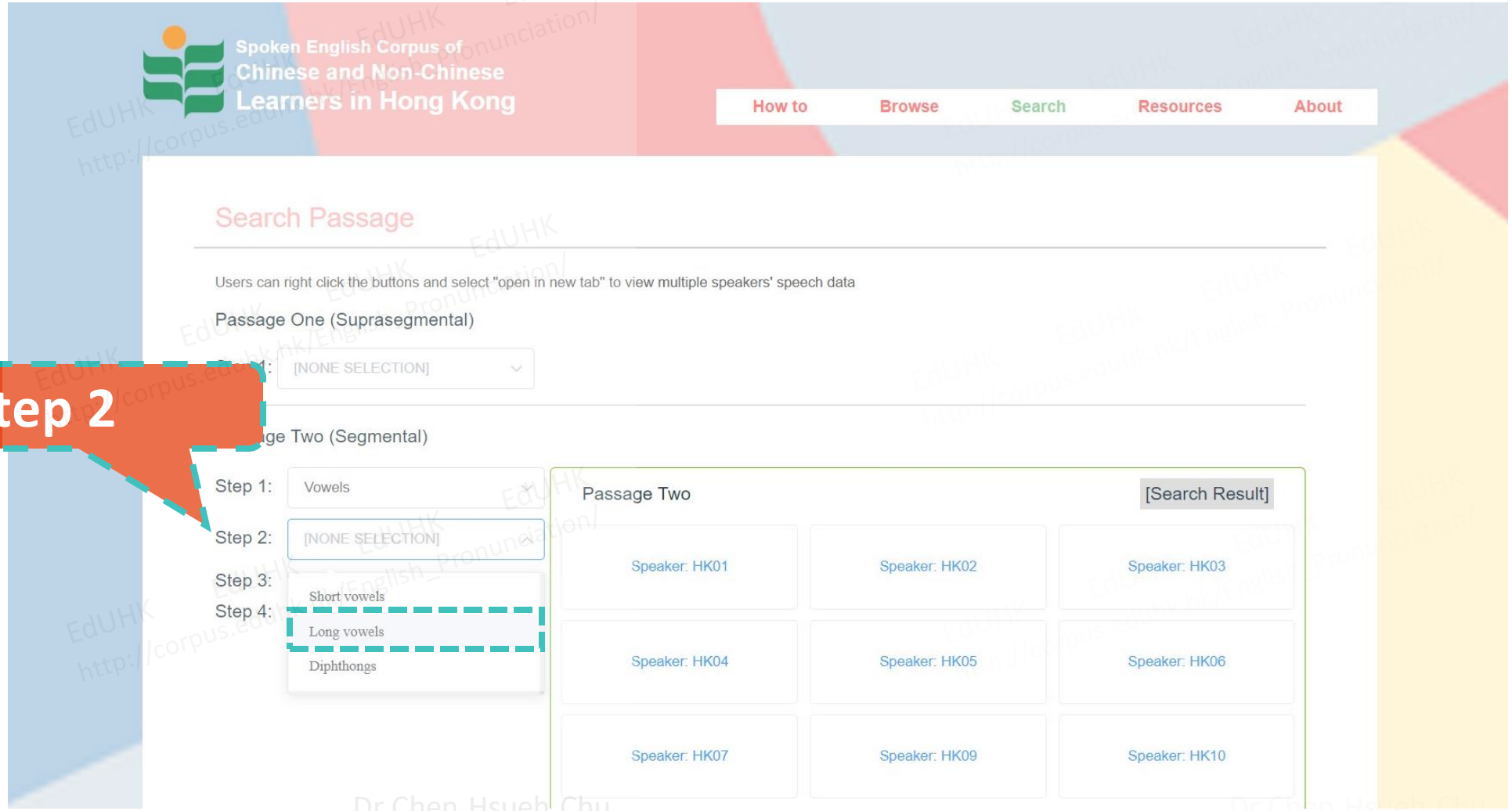

Step 2

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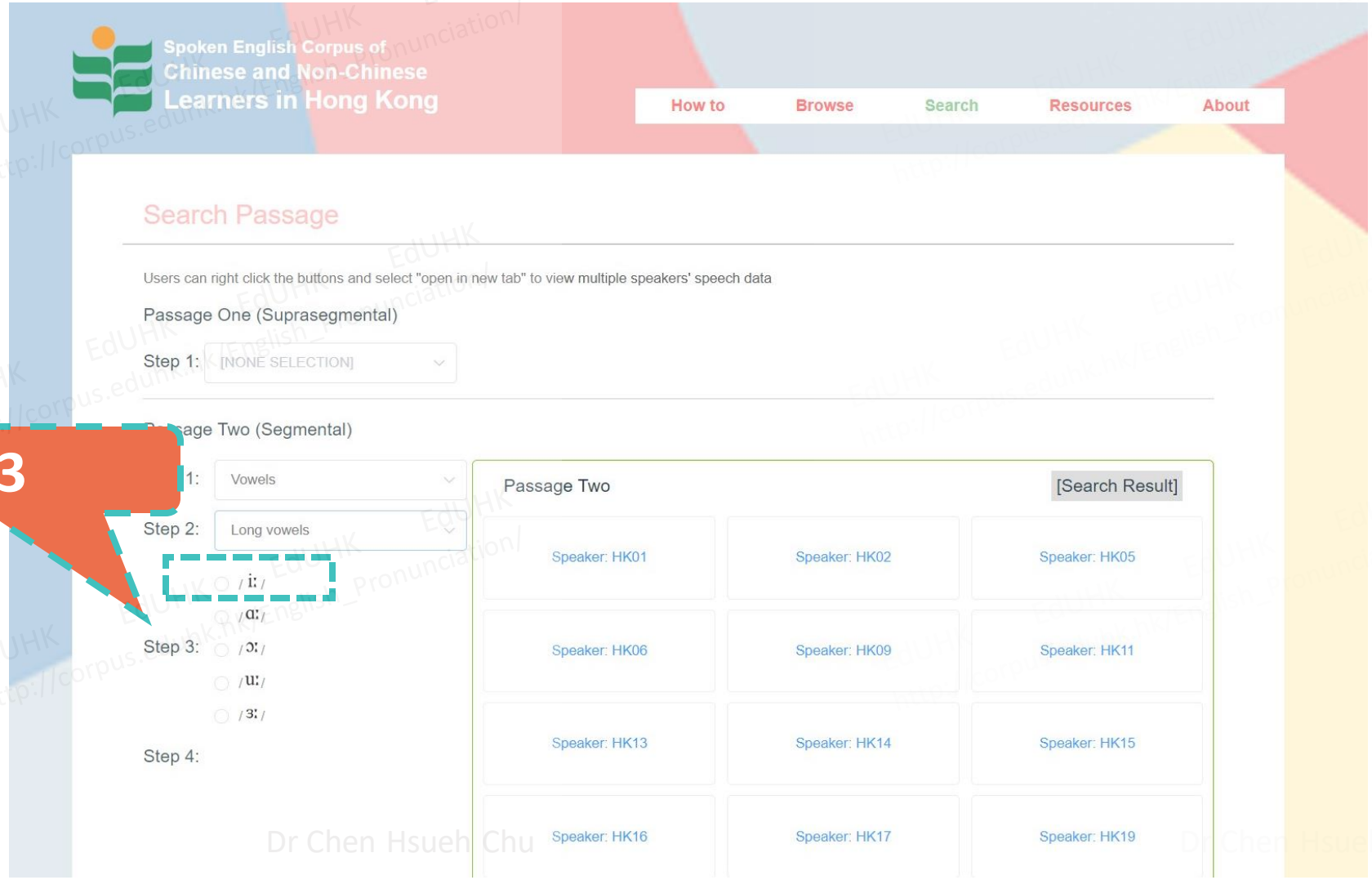

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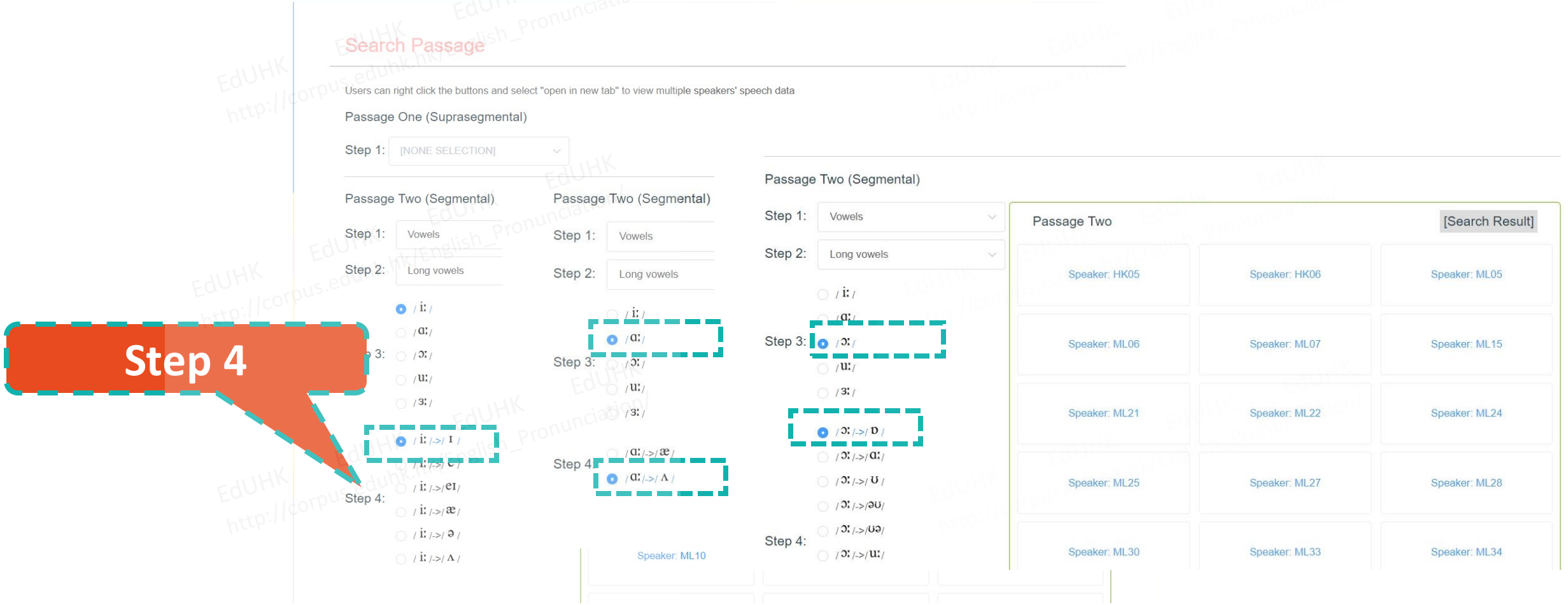
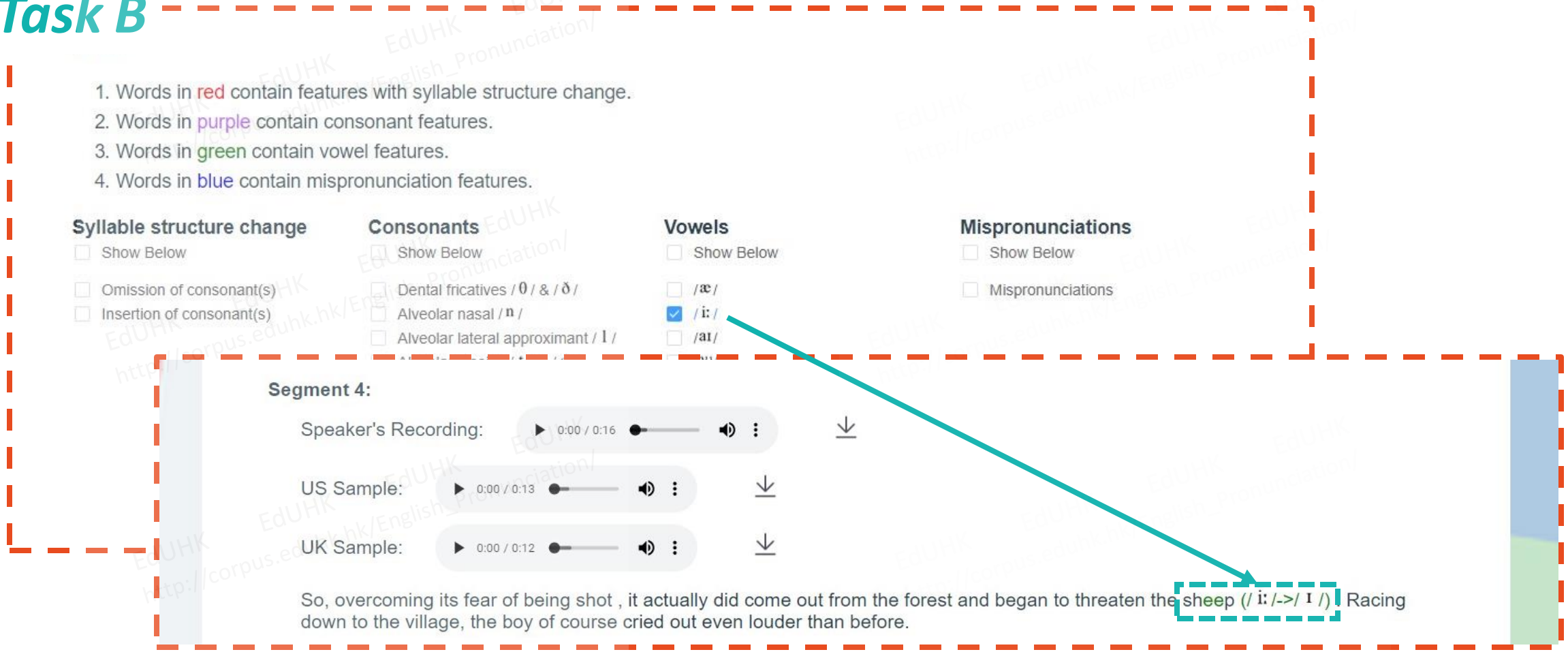


Exploitation of our new corpus…

Task B



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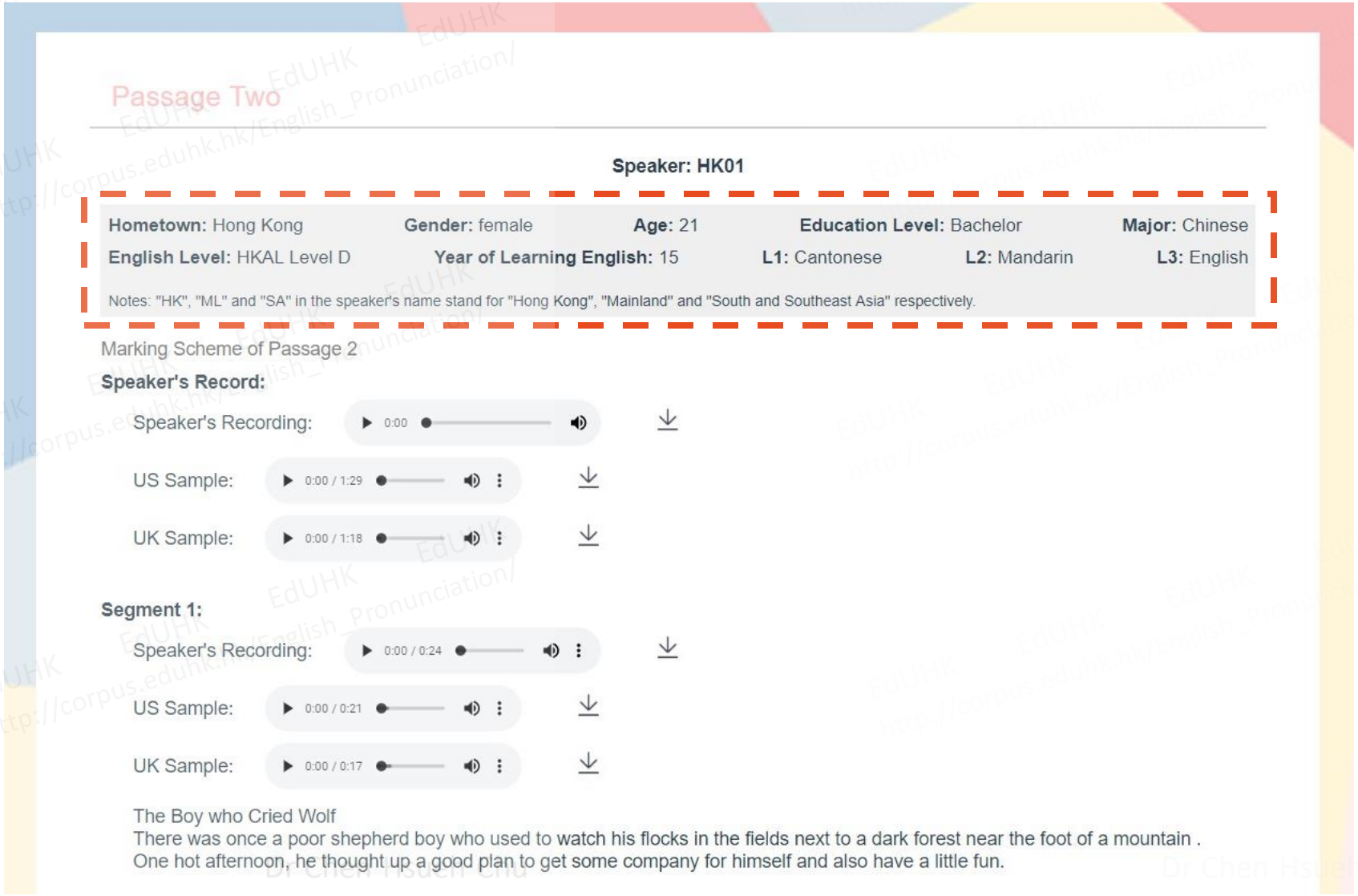

Passage Two

Speaker: HK01

Hometown: Hong Kong **Gender:** female **Age:** 21 **Education Level:** Bachelor **Major:** Chinese
English Level: HKAL Level D **Year of Learning English:** 15 **L1:** Cantonese **L2:** Mandarin **L3:** English

Notes: "HK", "ML" and "SA" in the speaker's name stand for "Hong Kong", "Mainland" and "South and Southeast Asia" respectively.

Marking Scheme of Passage 2

Speaker's Record:

Speaker's Recording: 0:00

US Sample: 0:00 / 1:29

UK Sample: 0:00 / 1:18

Segment 1:

Speaker's Recording: 0:00 / 0:24

US Sample: 0:00 / 0:21

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The Boy who Cried Wolf
There was once a poor shepherd boy who used to watch his flocks in the fields next to a dark forest near the foot of a mountain .
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Exploitation of our new corpus…

Task C

Task C

1. Predict the consonants which would be substituted for /θ/ by Hong Kong learners and fill in the blanks. (Hint: *think*, *catholic*, *breath*)
   /θ/→
   /θ/→
   /θ/→

2. Check the feature list provided on the web page 'For learners' and fill in the blanks.
   /θ/→
   /θ/→
   /θ/→

3. Visit the corpus http://phonetics2.eduhk.hk/#/home, and fill in the table below using 'search' function noting down the types of substitution for consonant /θ/, the numbers of HK, ML, SA speakers who have each type of these features and calculate percentage of occurrences for each group of speakers who make each type of features.

Type of substitution for /θ/	Group of speakers	Number of occurrences	Percentage of occurrences
/θ/→/ /	HK	/20	%
	ML	/96	%
	SA	/20	%
/θ/→/ /	HK	/20	%
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	ML	/96	%
	SA	/20	%

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Exploitation of our new corpus…

- Predict the consonants which would be substituted for /θ/ by Hong Kong learners and fill in the blanks.
- (Hint: *think*, *catholic*, *breath*)

- /θ/→ **/s/**
- /θ/→ **/f/**
- /θ/→ **/t/**

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Exploitation of our new corpus…

- 2. Check the feature list provided on web page ‘For learners’ and fill in the blanks.

  - /θ/→
  - /θ/→
  - /θ/→

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Exploitation of our new corpus…

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For Learners

01

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English Pronunciation of Cantonese speakers

02

» Pronunciation Feature List of Cantonese speakers

» Comparison of English and Cantonese (Segmentals)

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Exploitation of our new corpus…

2. Check the feature list provided on web page ‘For learners’ and fill in the blanks.

/θ/→/f/
/θ/→/t/
/θ/→/s/

7. Substituting/f/ for /θ/ e.g. ‘*thanks’*(/θæŋks/)→‘fanks’(/fæŋks/)
8. Substituting/t/ for /θ/ e.g. ‘*thin’*(/θɪn/)→‘tin’(/tɪn/)
9. Substituting/s/ for /θ/ e.g. ‘*think’* (/θɪŋk/)→‘sink’(/sɪŋk/)

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Exploitation of our new corpus…

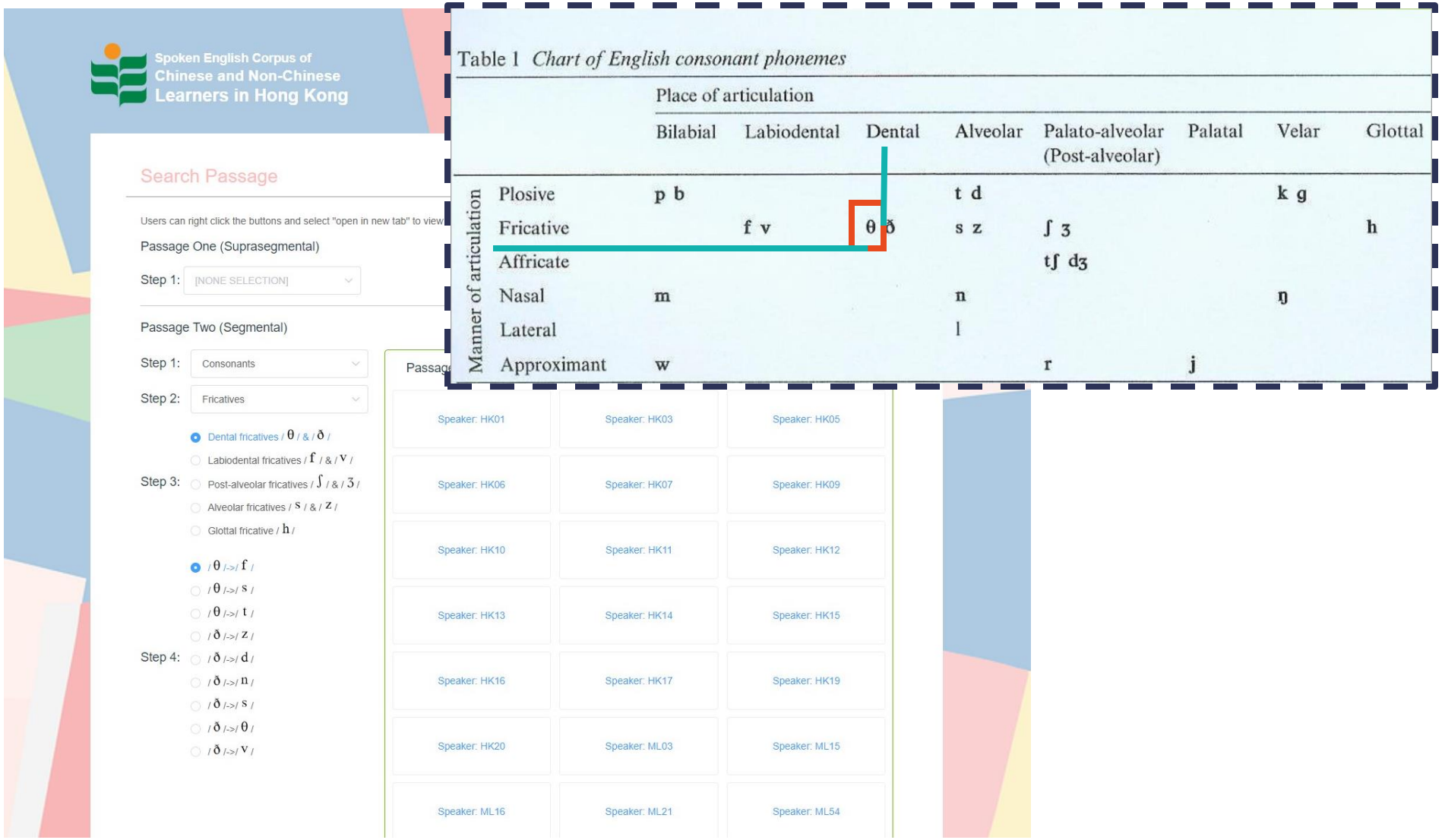
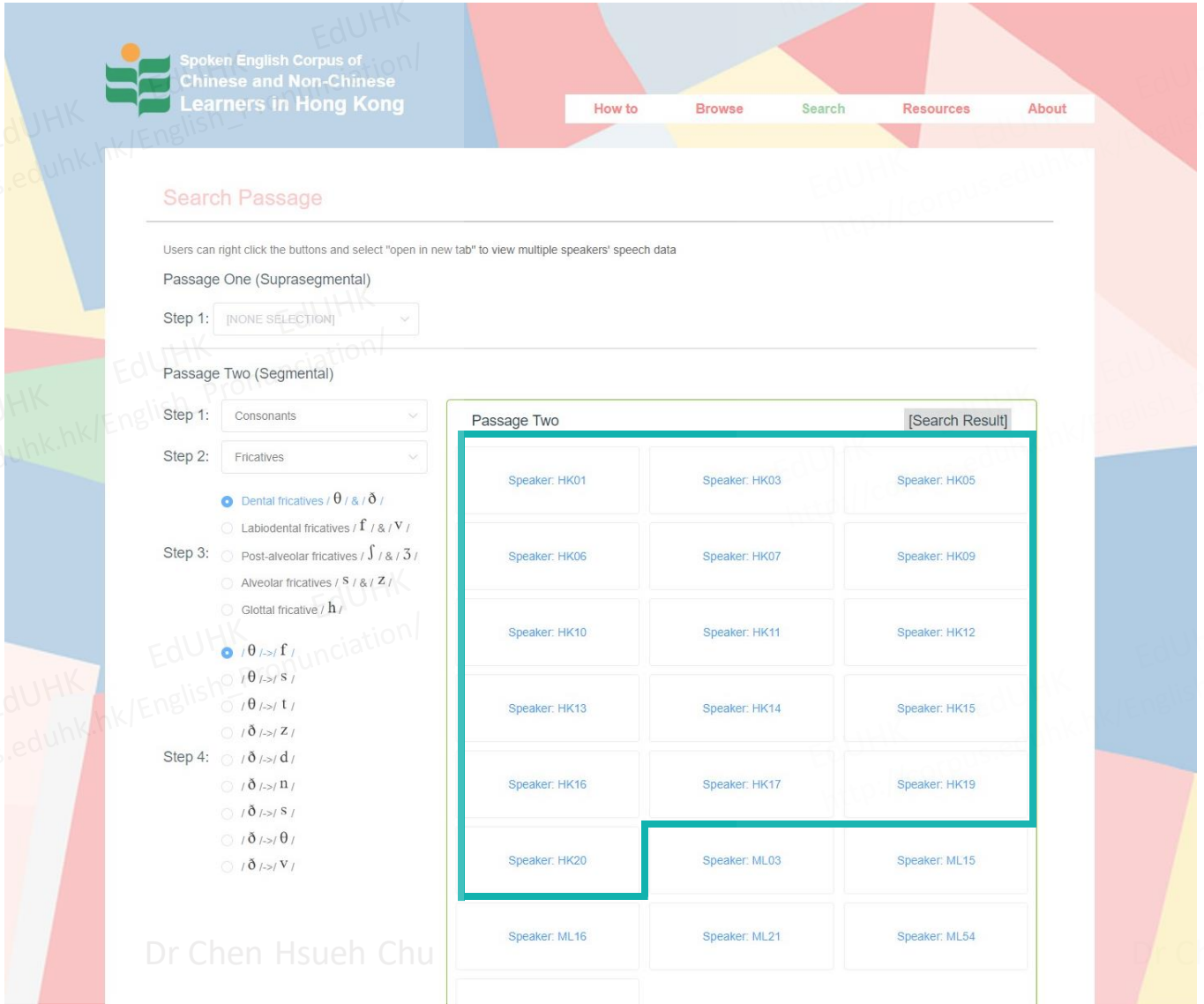


Table 1 *Chart of English consonant phonemes*

Manner of articulation	Place of articulation: Bilabial	Labiodental	Dental	Alveolar	Palato-alveolar (Post-alveolar)	Palatal	Velar	Glottal
Plosive	p b			t d			k g	
Fricative		f v	θ ð	s z	ʃ ʒ			h
Affricate					tʃ dʒ			
Nasal	m			n			ŋ	
Lateral				l				
Approximant	w				r	j		

Exploitation of our new corpus…



Exploitation of our new corpus…

Task C

3. Visit the corpus http://phonetics2.eduhk.hk/#/home, and fill in the table below using 'search' function noting down the types of substitution for consonant /θ/, the numbers of HK, ML, SA speakers who have each type of these features and calculate percentage of occurrences for each group of speakers who make each type of features.

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	ML	/96	%
	SA	/20	%
/θ/→/ /	HK	/20	%
	ML	/96	%
	SA	/20	%

4. Discuss with your partner(s)
   According to the results shown in the table above,
   a) which feature occurs with the highest frequency for the speakers overall?
   b) for each type, which group of speakers have the higher frequency of occurrence?
   c) what are the possible causes for such phenomenon?

Exploitation of our new corpus…

Task C

Task C

Type of substitution for /θ/	Group of speakers	Number of occurrences	Percentage of occurrences
/θ/→/f/	HK	17/20	85%
	ML	5/96	5.21%
	SA	0/20	0%
/θ/→/s/	HK	0/20	0%
	ML	68/96	70.83%
	SA	1/20	5%
/θ/→/t/	HK	1/20	5%
	ML	3/96	3.125%
	SA	8/20	40%

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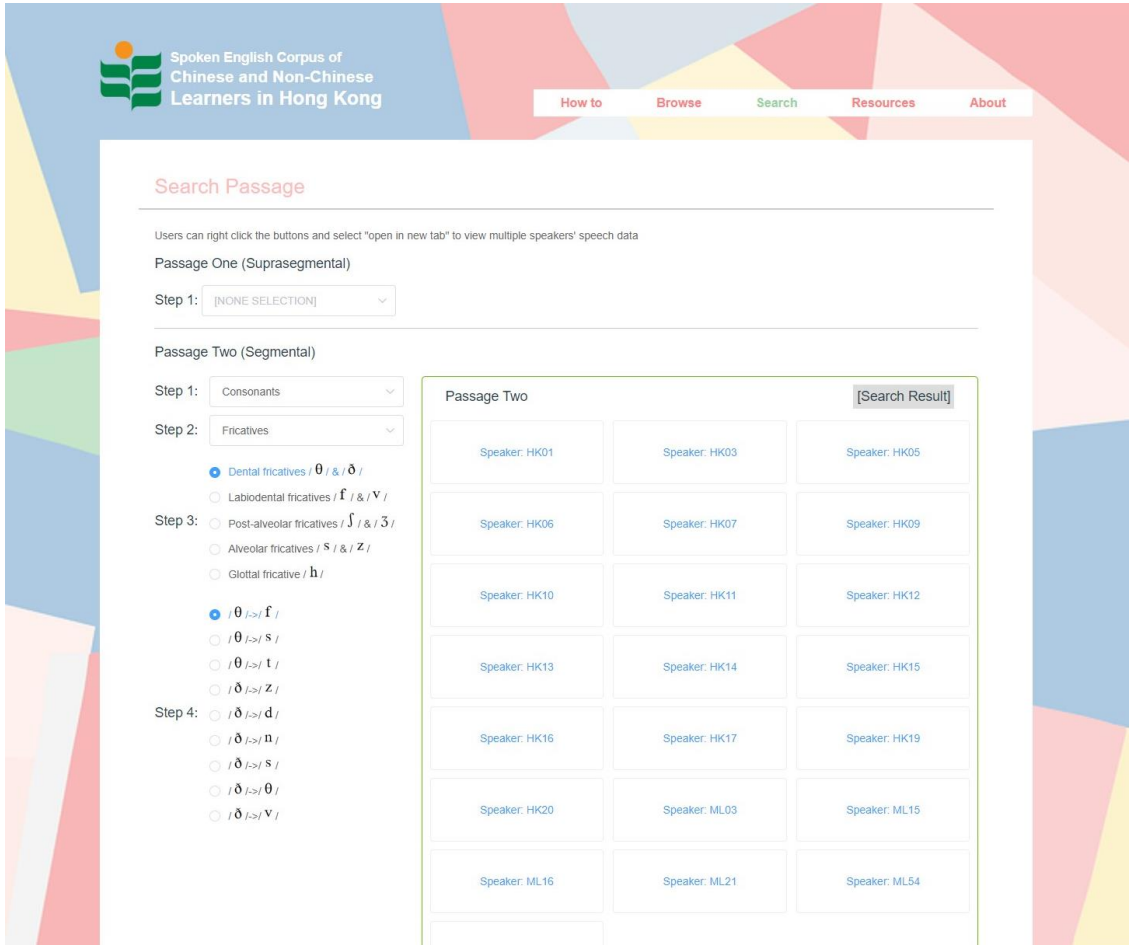
Possible remedies that may reduce or eliminate these features...



Exploitation of our new corpus…

Task D

Try to read

It's a piece of cake.

It's out of this world.

I feel a bit off today.

I'm off tomorrow.

Dr Chen Hsueh Chu

Exploitation of our new corpus…

The Boy Who Cried Wolf

Segment 1

There was once a poor shepherd boy who used to watch his flocks in the fields next to

a dark forest near the foot of a mountain. One hot afternoon, he thought up a good plan

to get some company for himself and also have a little fun.

Learner UK US

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Exploitation of our new corpus…

/ɒv/

/ɒf/

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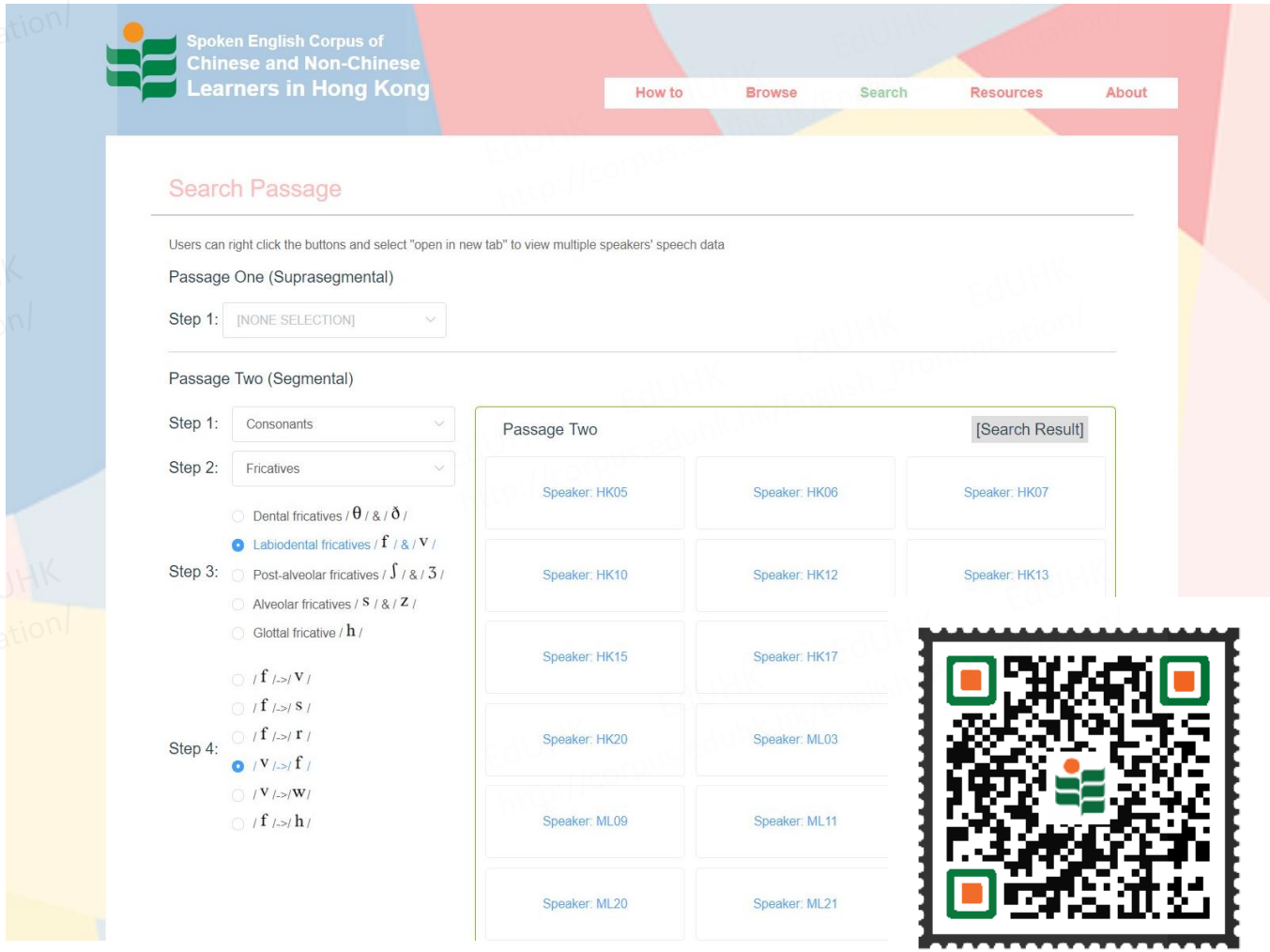
Exploitation of our new corpus…

/v/ → /f/



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Exploitation of our new corpus…

Try to read AGAIN

It's a piece of cake.

It's out of this world.

I feel a bit off today.

I'm off tomorrow.

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Scheduled Corpus-aided English Pronunciation Training Workshops and Online Lessons

Topic	Date	Time	Venue
Workshop I – Introduction of spoken corpus, phonetics and phonology, and pronunciation features; Exploitation of corpus data to do phonological analysis of segmental features	23-Oct-2019 (Wed)	15:30pm-17:30pm	B4-LP-03
Online Lesson I – Basic concepts of spoken corpus, segmental system of English and pronunciation features; Phonological analysis of segmental features	25-Oct-2019 (Fri)	By 23:55pm	-
Workshop II – Exploitation of corpus data to do phonological analysis of suprasegmental features (word stress, intonation); Introduction of speech rhythm, linking, pause, and speech rate	30-Oct-2019 (Wed)	15:30pm-17:30pm	D3-LP-02
Workshop III – Discussion of the benefits of doing corpus-based analysis through speech corpus and how we can use the findings in the language classroom	6-Nov-2019 (Wed)	15:30pm-17:30pm	B4-LP-03
Online Lesson II – Basic concepts of suprasegmental system of English, and pronunciation features; Phonological analysis of suprasegmental features	8-Nov-2019 (Fri)	By 23:55pm	-
Workshop IV – Development of teaching materials for primary and secondary students; Competition	20-Nov-2019 (Wed)	15:30pm-17:30pm	B4-LP-03

Dr Chen Hsueh Chu

Evaluation Form

Procedures of how to sign up for your free **Schoology** account to get access to our online session next week.

Instruction on Schoology Registration

Please **sign up** for your free **Schoology** account to get access to our online session next week.

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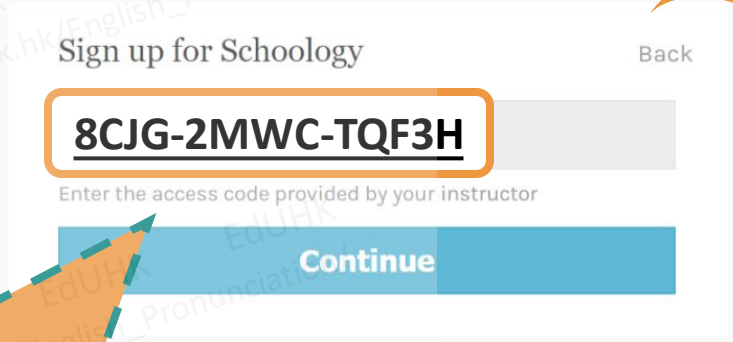
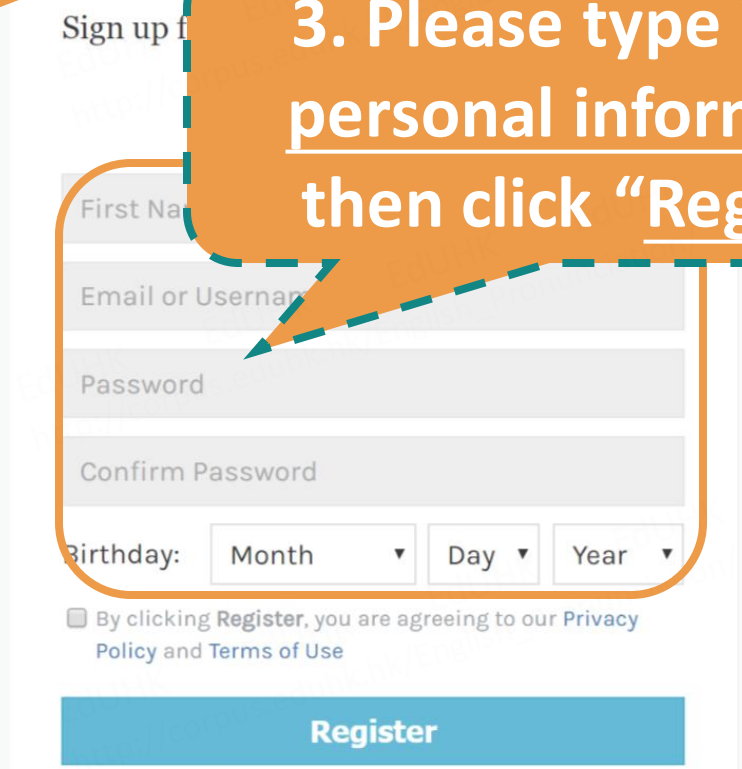
Instruction on Schoology Registration



2. Please type in the access code 8CJG-2MWC-TQF3H, then click "Continue".



3. Please type in your personal information, then click "Register".

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If your name is shown here, it means you have successfully joined the course.

4. Click on the course to access the course content.

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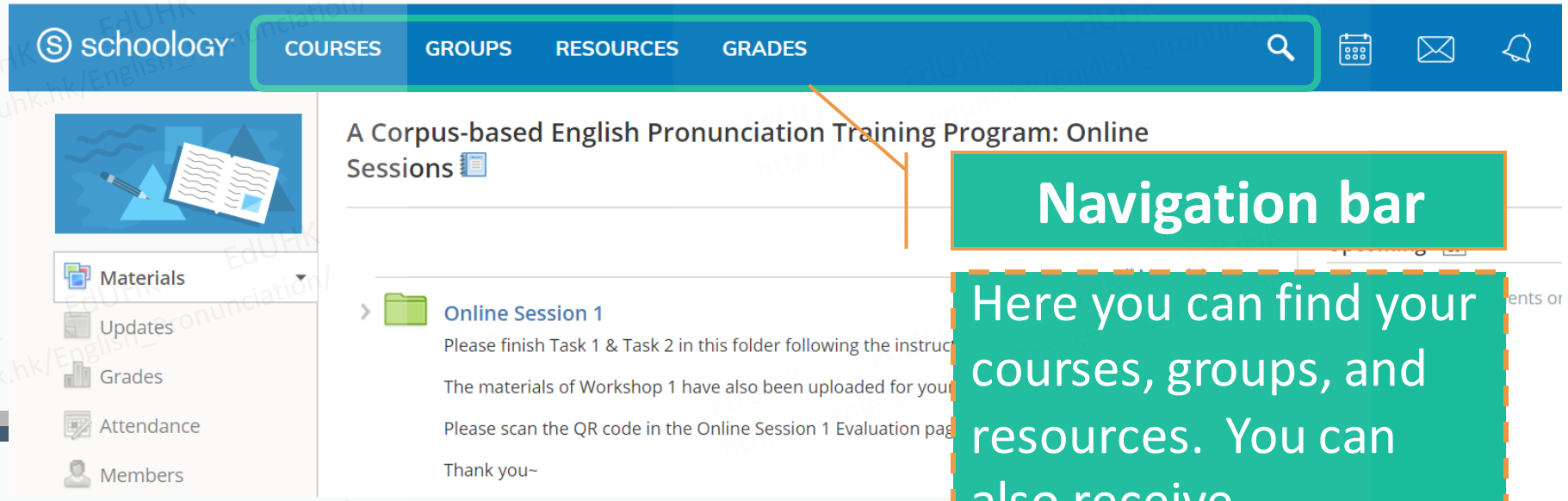
Instruction on Schoology Registration



Navigation bar

Here you can find your courses, groups, and resources. You can also receive notifications and requests, as well as update your profile and switch accounts.

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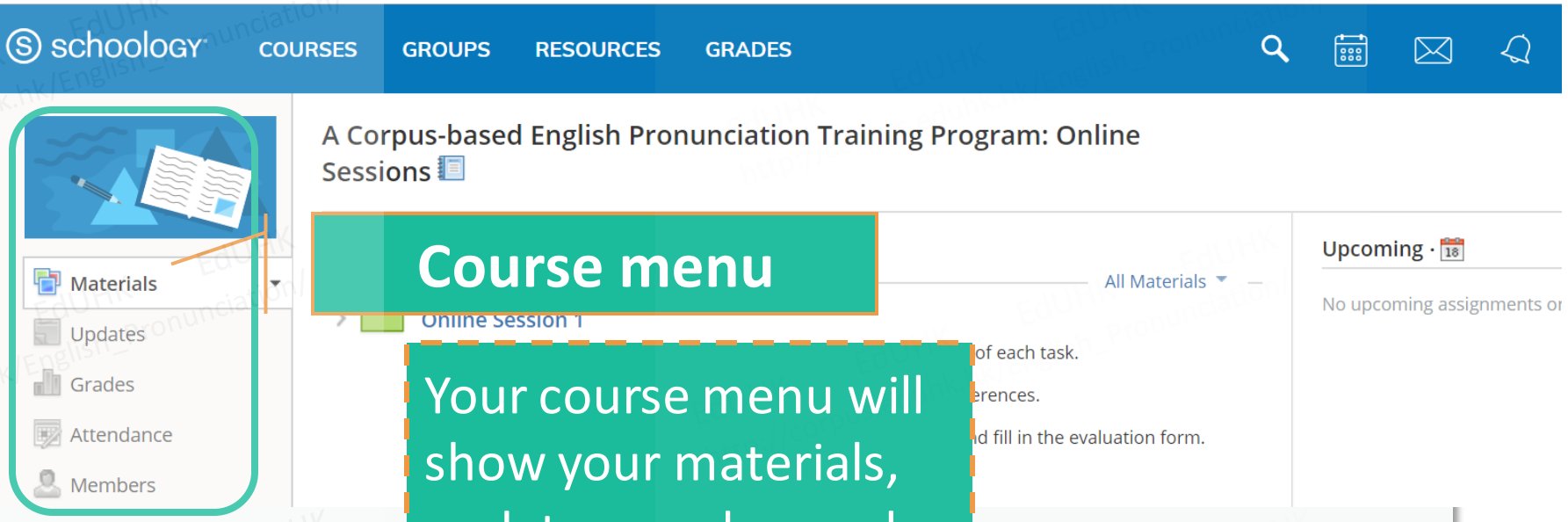
Instruction on Schoology Registration



Your course menu will show your materials, updates, grades, and more.

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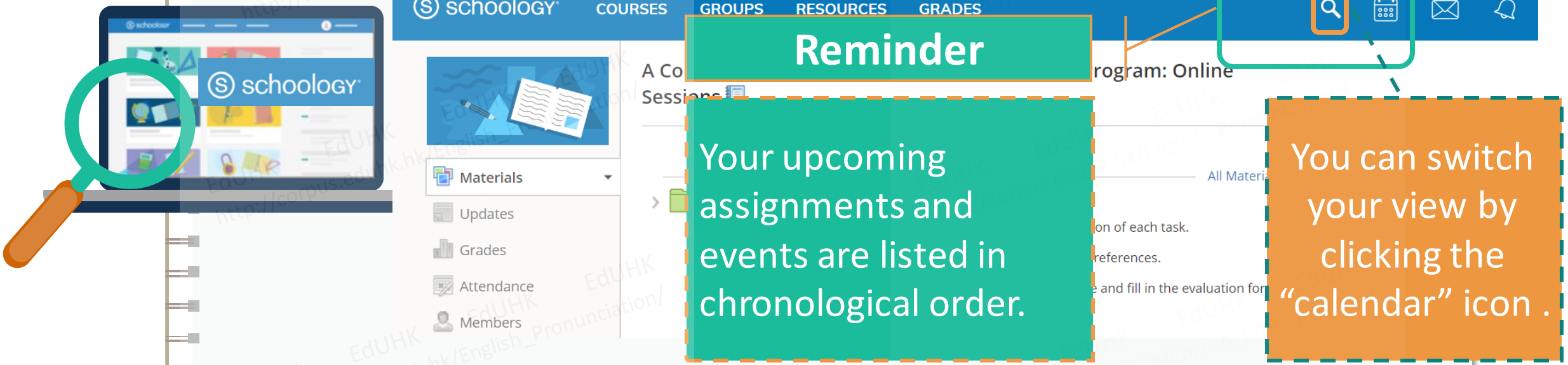

Thanks