

Lesson plan on English Word Stress



(Image generated using Adobe Firefly)

Author: Ms Zhou Xiaona, Dr Chen Hsueh Chu

Affiliation: The Education University of Hong Kong

Acknowledgement: This lesson plan is supported by a TDG project (led by Dr Chen) with contributions from Dr Han Qianwen, Ms Tian Jingxuan, and Ms Chan Ching Hang Justine

Lesson Topic/Title: Corpus & AI-aided instruction on English word stress

Title of the course where your lesson fits: Pronunciation

Brief rationale behind the lesson design: The lesson is specifically designed for the instruction on English word stress targeting at secondary students. Word stress, as one of key suprasegmental aspects in English pronunciation, have long been considered challenging by learners, particularly learners with lower proficiency levels. For example, in the corpus entitled *The English Speech Corpus with Different Proficiency Levels* (Chen, 2022), inappropriate word stress placement is most frequently found among learners scoring Band 5 to 6. It is worth mentioning that some learners with higher proficiency levels also have this feature. This lesson design attempts to adopt corpus-based and AI-enhanced approaches to address this issue. Based on the four basic steps derived from CBLP, the intertwined use of native corpus and learner corpus is used to raise students' awareness, allow them to notice the word stress patterns used by native speakers and learners, and encourage them to reflect on their own difficulties, while AI tools such as Murf and Poe are used to facilitate students' practice on word stress patterns in both listening and speaking.

Target students: Secondary school students (S3)

Corpora used:

- The Speech Corpus with Different Proficiency Levels
https://corpus.eduhk.hk/english_speech_corpus/ (a learner corpus)
- YouGlish: <https://youglish.com/> (a native speaker corpus)

Non-corpus resources used:

- (1) PowerPoint
- (2) Online videos/audios
 - <https://www.youtube.com/watch?v=O-sOjBpYJCM>
 - https://corpus.eduhk.hk/english_pronunciation/index.php/word-stress-teaching-kit/
 - <https://lml-learning.eduhk.hk/englishspeechcorpus/ViewTaskPart.aspx?id=15&partid=1&categoryid=4&key=wstr&displayid=15>
- (3) ChatGPT on Poe: <https://poe.com/ChatGPT>
- (4) Mentimeter: <https://www.menti.com/alghtub7e4h4>
- (5) Murf <https://murf.ai/>
- (6) Worksheets

Lesson duration: double lesson (80 mins in total)

Prior knowledge:

Before the lesson, students have learned:


- (1) International Phonetic Alphabet (IPA) symbols
- (2) some terminologies (e.g., vowel, consonant, syllable)

Learning objectives:

After the lesson, students are able to:

- (1) self-identify their own English word stress
- (2) use text-to-speech AI tools to generate samples specifically focusing on word stress
- (3) use conversational AI tools to generate more examples following different word stress rules
- (4) use conversational AI tools to receive feedback on English word stress

Lesson Plan

| Time | Key stages | Procedures | Purposes | Interaction mode | Teaching resources/materials |
|--------|---|--|--|------------------|---|
| 7 mins | Stage 1: Testing students' prior knowledge | <p>Step 1 (2 mins) T plays a video clip (0:08-0:18) where a speaker says three sentences containing inappropriate use of word stress and asks Ss to read aloud the sentences and infer what the speaker wants to convey.</p>  <p><i>Target sentences:</i></p> <ol style="list-style-type: none"> 1. I just want to be <u>a</u> pea. 2. <u>Desert</u> is my favourite thing. 3. Some people have school <u>for</u> beer. <p>Step 2 (2 mins) T continues to play the video clip (0:51-1:48) to show what the</p> | <ul style="list-style-type: none"> - To spark students' interests in the topic - To build up the context for the whole lesson - To activate prior knowledge | T - Ss | Online video: https://www.youtube.com/watch?v=O-sOjBpYJCM & PPT |

speaker really wants to say and then lets Ss focus on the changed words and read again the sentences.



Target sentences:

1. *I just want to be **happy**.*
2. ***Dessert** is my favourite thing.*
3. *Some people have school **phobia**.*

Step 3 (3 mins)

T introduces the importance of appropriate use of word stress in daily communication and leads in the focus of the lesson – word stress, in the meantime, emphasizes that the major concern of word stress is the identification of the stressed syllable within a word.

27 mins

**Stage 2:
Engaging
students in**

Step 1 (8 mins)

T then plays an audio file (i.e., Speaker 15 of *The Speech Corpus with Different Proficiency Levels*) without showing the

- To familiarize Ss with learners'

T - Ss

Learner corpus (*The Speech Corpus with*

hands-on corpus search

annotation and asks Ss to identify the words which are inappropriately pronounced in terms of word stress.

Pronunciation

Speaker : 15
Gender : Female
IELTS Speaking Score : 5.5
IELTS Speaking Session: Part 1

E: Have you changed a lot since your childhood? ▶ 0:00 / 0:04

S: Of course, I have changed a lot on my **viewpoint** (VIEWpoint→VIEWPOINT) or even my dress style, my food choice, you know. Everybody will change after they grow up. But I have to say, **childhood** (CHILDhood→childHOOD) is the most happiest, the... **period** (PERiod→peRIod) in our... in our life. So, even if there... there is... there are those changes, we still have to handle it... h... to... to... to achieve it. ▶ 0:00 / 0:49

T demonstrates how to show the annotations for word stress of Speaker 15 using the search function of the corpus (direction: none selection → pronunciation → word stress → word stress → select Speaker 15)

香港教育大學
The Education University of Hong Kong

Home How To About Browse Search

Search Features

Band : NONE SELECTION
Category : Pronunciation
Step 1 : Word stress
Step 2 : Word stress

Step 2 (2 mins)

T plays again the recordings of Speaker 15 and explains the ways in which this speaker used to pronounce the words ‘viewpoint’, ‘childhood’ and ‘period’ by putting equal emphasis

common features on word stress through the use of corpus

- To demonstrate to Ss how to use the corpus

Different Proficiency Levels):

https://corpus.eduhk.hk/english_speech_corpus/

on all the syllables of the word and emphasizing wrong syllable.

Step 3 (5 mins)

T plays the recordings of the target words on YouGlish which functions as a native corpus where users can access authentic video-recorded speech samples produced by native speakers.



How to pronounce **viewpoint** in British English (5 out of 360):



You actually got a completely fresh **viewpoint**.

Step 4 (7 mins)

Ss are asked to form in a group of 5 to 6 and perform corpus-based analysis on word stress (completing Worksheet 1).

- To let Ss self-reflect their own

Ss – Ss

Native speaker corpus (*YouGlish*):
<https://youglish.com/>

Search function of the corpus:

Worksheet 1

Hands-on corpus search task

Use search function and Identify inappropriate use of word stress by **Speakers 3, 13, 29, 41 and 66** in The English Speech Corpus with Different Proficiency Levels. (https://corpus.eduhk.hk/english_speech_corpus/).

(Note: Please just focus on the response to the question 'have you changed a lot since your childhood?'.)

| Speakers | If the speaker has inappropriate use of word stress or not (Y/N) | List the words pronounced with inappropriate word stress |
|------------------|--|--|
| e.g., Speaker 15 | Y | viewpoint childhood period |
| Speaker 3 | | |
| Speaker 13 | | |
| Speaker 29 | | |
| Speaker 41 | | |
| Speaker 66 | | |

Step 5 (5 mins)

T asks Ss in different groups to share their answers and demonstrate again the use of search function to search the inappropriate use of word stress by Speaker 29 (i.e., maTURE → MAture).

features on English word stress

<https://lml-learning.eduhk.hk/englishspeechcorpus/SearchFeatures.aspx>
& Worksheet 1

19 mins

Stage 3: Encouraging students in inductive discovery

Step 1 (6 mins)

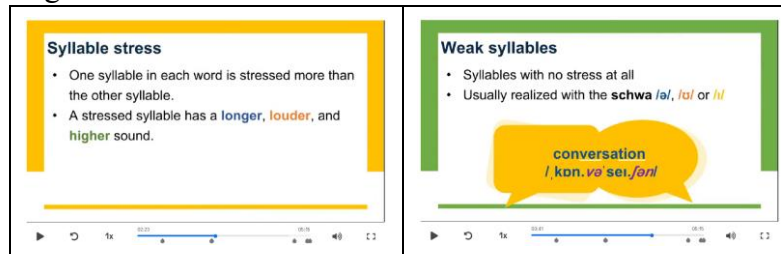
T further asks Ss to categorize the words pronounced inappropriately by the learners in the corpus based on the perspectives such as the word class and syllable structure. For example, 'viewpoints' is a compound noun with primary stress fell on the first syllable of the word 'view'.

- To raise Ss' awareness on English word stress

T - Ss

Step 2 (7 mins)

T gives explicit instructions on word stress using an online instructional video, including basic concepts and rules of English word stress.



(*Note: The video is uploaded to EdPuzzle, with 3-5 questions inserted. For example, before presenting the rules, a list of words following the same rule are provided to give Ss opportunities to self-explore the possible rule.)

Step 3 (6 mins)


T asks each group of Ss to list more words that fits other word stress rules and can be used to respond to the question 'have you changed a lot since your childhood?' (Worksheet 2). T encourages Ss to include as many words as possible that they consider difficult in terms of word stress placement. T then asks each group to share their answers on Mentimeter which is an online platform used for the generation of word cloud.

- To give Ss opportunities to apply the knowledge they learned in real context

Ss - T

Online instructional video:
<https://edpuzzle.com/media/63f2332992e699412ae4ccdf>
& PPT

Worksheet 2

| | | | | | |
|---------|--|--|---|---------|--|
| | | <p>Join at menti.com use code 6672 5241 Mentimeter</p> <p>Please list words that fit other word stress rules and can be used to respond to the question 'have you changed a lot since your childhood?'. 12 responses</p>  <p>T then checks all the words on Mentimeter with Ss.</p> | | T – Ss | Mentimeter: https://www.menti.com/alghtub7e4h4 |
| 13 mins | Stage 4: Facilitating understanding with the aid of AI technology | <p>Step 1 (7 mins) T demonstrates how to use ChatGPT on Poe to generate more ideas as to which multisyllabic words can be included and have ChatGPT indicate the rules the suggested words follow.</p> | <ul style="list-style-type: none"> - To expose Ss to more examples of multisyllabic words following different rules - To reinforce Ss' understanding of the rules | Ss – Ss | ChatGPT on Poe: https://poe.com/ChatGPT |

Please list multisyllabic words in K2 list that fits different word stress rules and that can be used by secondary school students to respond to the question 'have you changed a lot since your childhood?' to form a 5-sentence not isolated response and in a natural way.

ChatGPT (Poe)

Certainly! Here's a 5-sentence response to the question "Have you changed a lot since your childhood?" using multisyllabic words from the K2 list that follow different word stress patterns, presented in a natural way:

1. "Absolutely! Since my childhood, I've undergone a remarkable transformation in various aspects of my life. I've become more self-reliant, taking on responsibilities and becoming independent."
2. "Definitely, I've developed a thirst for knowledge and a passion for learning. I've expanded my interests and explored diverse subjects such as science, literature, and history."
3. "Without a doubt, I've become more socially conscious and empathetic. I actively engage in volunteer work, seeking to make a positive impact on the lives of others."
4. "Certainly, my creativity has flourished over the years. I've delved into artistic pursuits like painting and photography, expressing my thoughts and emotions through visual mediums."
5. "Undoubtedly, I've become more resilient and adaptable. I've faced challenges head-on, learning from setbacks and using them as stepping stones to personal growth."



Talk to ChatGPT or @ a bot



(*Note: T needs to emphasize that the responses from conversational AI tools may not be entirely correct.)

T asks each group of students to generate their responses to the question 'have you changed a lot since your childhood' using the words listed as much as possible (including words in Stage 1, i.e., 'happy', 'dessert', and 'phobia').

Step 2 (6 mins)

T tells Ss that online dictionary can be used to give sample

- To encourage sharing of ideas among Ss

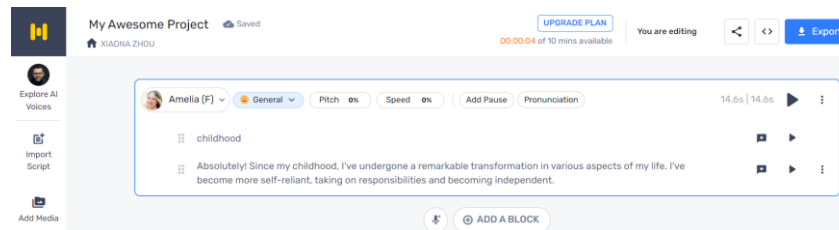
- To generate

T - Ss

Murf: <https://murf.ai/>

pronunciation of individual words. For spontaneous speech, text-to-speech tools can be used to generate sample recordings.

T demonstrates the use of Murf by generating recordings of selected words (e.g., childhood) and sentences respectively.



T also plays the generated recordings, guiding Ss to focus on the acoustic features of stressed syllable (longer duration, higher pitch, greater loudness) as introduced in the instructional video.

(*Note: The recordings were generated using Murf by the teachers in advance due to the limited class time.)

recordings of native speakers as an exemplar using Murf)

| | | | | | |
|---------|--|---|--|--|--|
| 14 mins | <p>Stage 5: Activating knowledge by putting it into oral production</p> | <p>Step 1 (4 mins) T invites each group to read aloud their responses and lets Ss select two responses that contain difficult words in terms of word stress.</p> <p>Step 2 (4 mins) T then generates the sample recordings of the two responses</p> | <p>- To compare different pronunciation of the word stress between learners/themselv</p> | <p>Ss - T Ss - Ss T - Ss</p> | <p>Murf: https://murf.ai/</p> |
|---------|--|---|--|--|--|

| | | | | | |
|--|--|---|--|---------------------------|--|
| | | <p>and asks Ss to imitate.</p> <p>Step 3 (4 mins) T invites two groups to verbally give their responses using ChatGPT on Poe and share the feedback on the use of word stress with the class. T also asks other Ss to give feedback.</p> <p>Step 4 (2 mins) T recaps the learned content in this lesson. T then assigns take-home task to Ss.</p> | <p>es and native speakers (both real and AI-generated)</p> <ul style="list-style-type: none"> - To give Ss chances to appreciate other Ss' performance - To guide Ss to use conversational AI tools to receive feedback. | <p>Ss - T Ss - Ss</p> | <p>ChatGPT on Poe: https://poe.com/ChatGPT</p> <p>Take-home task</p> |
|--|--|---|--|---------------------------|--|

Worksheet 1

Hands-on corpus search task

Use **search function** and identify inappropriate use of word stress by **Speakers 3, 13, 29, 41 and 66** in The English Speech Corpus with Different Proficiency Levels (https://corpus.eduhk.hk/english_speech_corpus/).

(Note: Please just focus on the response to the question ‘**have you changed a lot since your childhood?**’.)

| Speakers | If the speaker has inappropriate use of word stress or not (Y/N) | List the words pronounced with inappropriate word stress |
|------------------|--|--|
| e.g., Speaker 15 | Y | viewpoint childhood period |
| Speaker 3 | | |
| Speaker 13 | | |
| Speaker 29 | | |
| Speaker 41 | | |
| Speaker 66 | | |

Worksheet 2

Production task

Please answer the question ‘Have you changed a lot since your childhood?’ using multisyllabic words following at least THREE word stress patterns with at least 5 sentences.

Hints:

| No. of syllable /Stress pattern | Rules | Words following the corresponding structure |
|---------------------------------|--------------------|---|
| two-syllable word | compound noun | e.g., viewpoint |
| three-syllable word | compound adjective | e.g., outgoing |
| long word | with suffix ‘-ion’ | e.g., transformation |

Your answer:

Worksheet 3

Take-home task

1. Use Murf to generate a recording of your own or the sample answer

Sample answer to the question ‘Have you changed a lot since your childhood?’
(with multisyllabic words highlighted)

Looking back at my **childhood**, it's clear that I've changed quite a bit. When I was **younger**, I was a **happy** and **curious** child, **always exploring** and **asking endless questions**. But as I grew **older**, I **became** more **thoughtful** and **introverted**, **burdened** by **responsibilities** like grades and **friendships**. I also faced **challenges** like school **phobia**, but with **support** from **parents**, **teachers** and my friends, I **overcame** it. It's been a **gradual transformation**, and **sometimes** I miss the **carefree** days of my **childhood**. Still, I'm **excited** for the **future**. Life **offers** sweet **moments**, like **indulging** in a **delicious dessert**, and I look **forward** to the **adventures** it brings.

(Note: Try to include the 'bonus words' to get extra points!)

2. Use conversational AI tools to practice the answer (either your own answer or the sample answer)

Note: Please record yourself while practicing.