



CAMBRIDGE

Creative Bilingual Teaching Using CLIL

From Theory to Practice:

Implementing CLIL for Non-Language Subjects

Yaxin Sun

12 April, 2025

Content

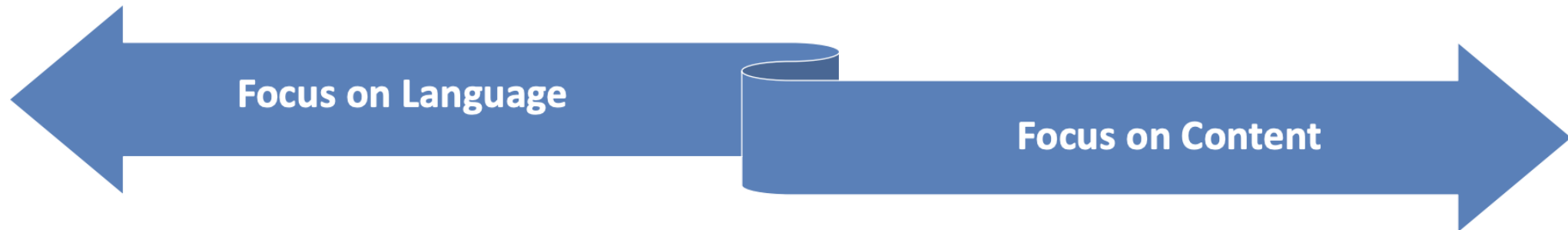
- Understand the core principles of CLIL and its benefits for bilingual education.
- Explore key strategies to integrate language support into content teaching.
- Engage in a quick interactive activity to apply CLIL techniques in their subject.



“Many non-language subject teachers struggle with helping students master content in a second language. CLIL bridges this gap by integrating language learning into subject teaching.”

(Coyle, Hood, & Marsh, 2010)

CBI, CLIL & EMI: Differing Approaches and Goals



CBI – Content-based Instruction (of language)

- Content acts as a vehicle for language learning
- Intended outcomes are language / performance oriented
- Students are assessed on language learning outcomes
- Content learning outcomes are peripheral or at a general knowledge level
- CBI approach often used in language classes by language teachers
- Also known as Content-based Language Teaching (CBLT)

CLIL – Content and Language Integrated Learning

← Soft CLIL Hard CLIL →

- Classes have a dual focus, on both content and language learning
- Intended outcomes are language / performance and content oriented
- Students are assessed on language and content learning outcomes
- CLIL courses often taught by language teachers (Britain, Japan, South America) or content-specialist teachers (Europe)
- Also known as Integrating Content and Language in Higher Education (ICLHE) or Integrating Content and Language (ICL)

EMI – English-medium Instruction (of content)

- English acts as a vehicle for content learning
- Intended outcomes are content oriented
- Language learning aims are implicit or incidental
- Students are assessed on content learning outcomes
- Language proficiency outcomes are peripheral
- EMI courses often taught in content classes by subject content specialists

Core Principles

1

Language Objectives

*Understand
Language Barriers
Communicative &
Academic
Languages*

2

Theoretical
Understanding

*Cummins'
Linguistic
Interdependence
Krashen's Input
Constructivism*

3

Guiding Input

*Language Routine
Translanguage/
Code Switch
Authenticity
Visuals*

4

Supporting Output

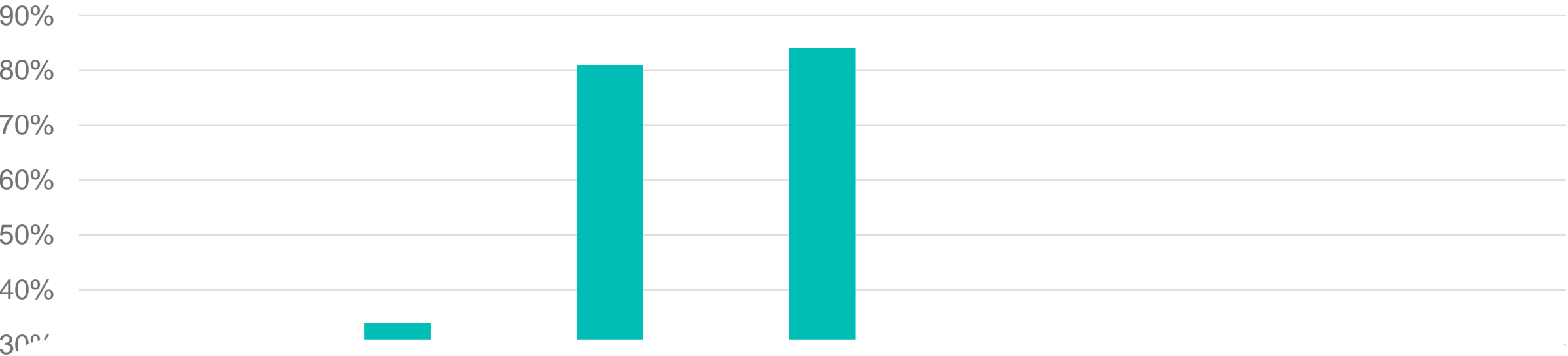
*Language Format
Text-task
Procedure*

5

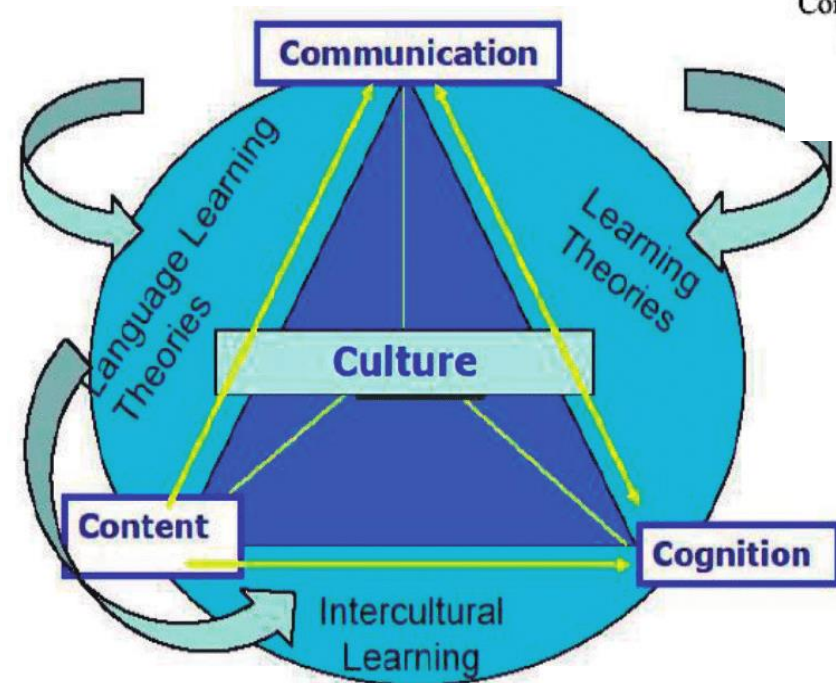
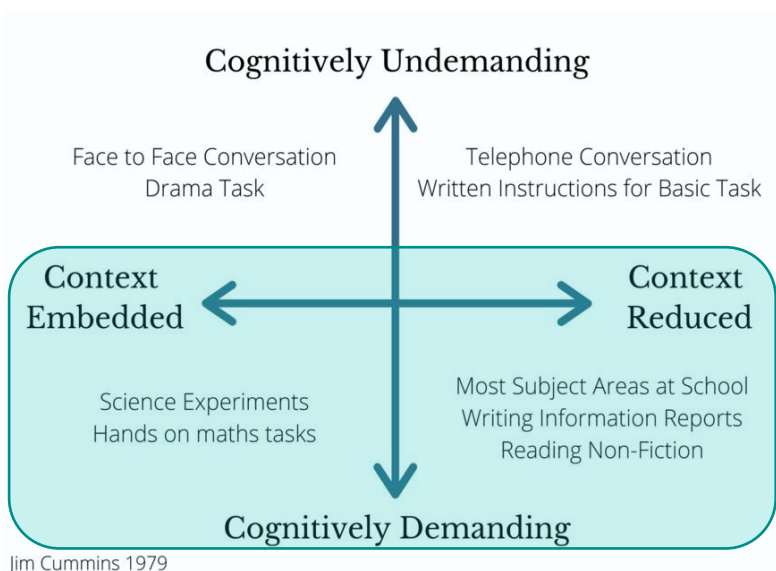
Cognitive
Development

*Content Learning
High-order
Thinking Skill*

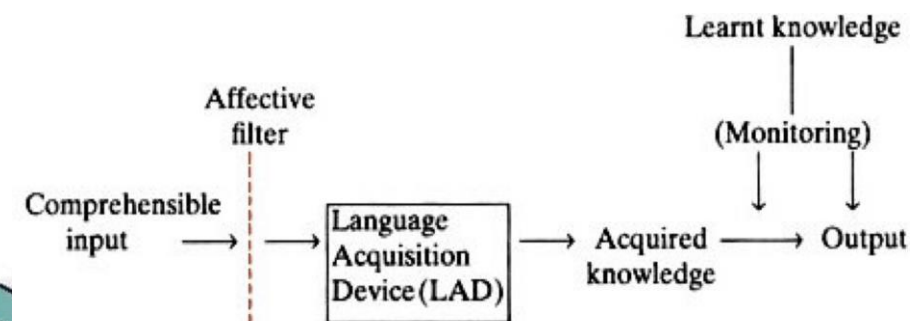
Key Challenges



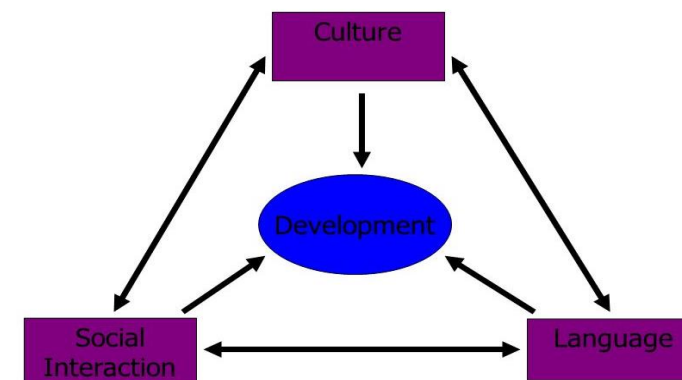
Theoretical Understanding



(Source: Coyle, 1999)



(Source: Krashen, 1981)



(Source: Vygotsky's Social Theory of Development)

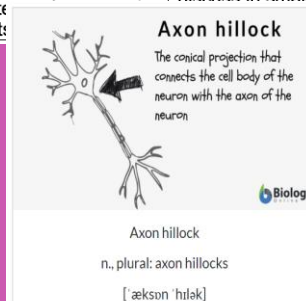
Key CLIL Strategies

• Scaffolding Language & Content Together

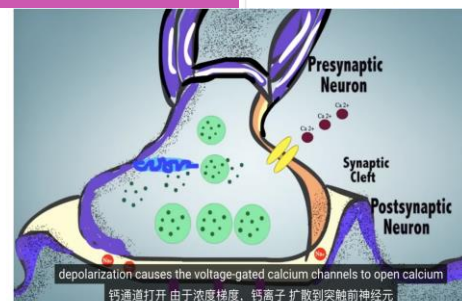
- Use sentence starters, graphic organizers, and visual aids to support both content learning & academic language use.
- *Example:* Instead of asking the definition, provide a sentence frame to highlight the key content.
 - *Example:* Instead of giving paragraph description, ask students to reorganise the steps of synaptic transmission.

• Guiding Input

| Time | Topic content and teacher activity | Learner activity | Formative assessment |
|--------|--|--|---|
| 15mins | Role of Neurotransmitters Explain neurotransmitter function, focusing on acetylcholine. Use sentence starters (e.g., "Acetylcholine helps..."). | Complete sentence starters, watch video, take notes. Discuss how neurotransmitters relate to neuron communication. | Fill-in-the-blank on neurotransmitter function. |
| 20mins | Mechanism of Synaptic Transmission Guide students through synaptic transmission steps using visuals, sentence structures (e.g., "First..., Then..."). | Participate in sequencing activity, arrange steps in pairs. Use provided language frames to describe each step. | <i>Pair work to arrange steps in correct order; oral explanations of steps using language frames.</i> |
| 5mins | Introduction and Lesson Objectives Introduce the lesson topic and objectives. Highlight key vocabulary like "synapse," "presynaptic," "postsynaptic." | Listen actively, note key terms. Discuss initial thoughts on synapses, sharing prior knowledge in pairs. | Q&A on key vocabulary and understanding of objectives. |
| 10mins | Basic Structure of a Synapse Describe synapse structure, using diagrams to label the synaptic cleft, postsynaptic neuron, and presynaptic neuron. | Label diagrams individually, then discuss in small groups to check. | Group feedback on synapse parts to reinforce vocabulary. |



- The space between the presynaptic neuron and the postsynaptic neuron is called the synaptic _____.
- The membrane on the receiving side of the synapse is known as the _____ membrane.
- Neurotransmitters are stored in synaptic _____ within the presynaptic neuron.



Synaptic Transmission
<https://www.youtube.com/watch?v=zx46xADMIBY>

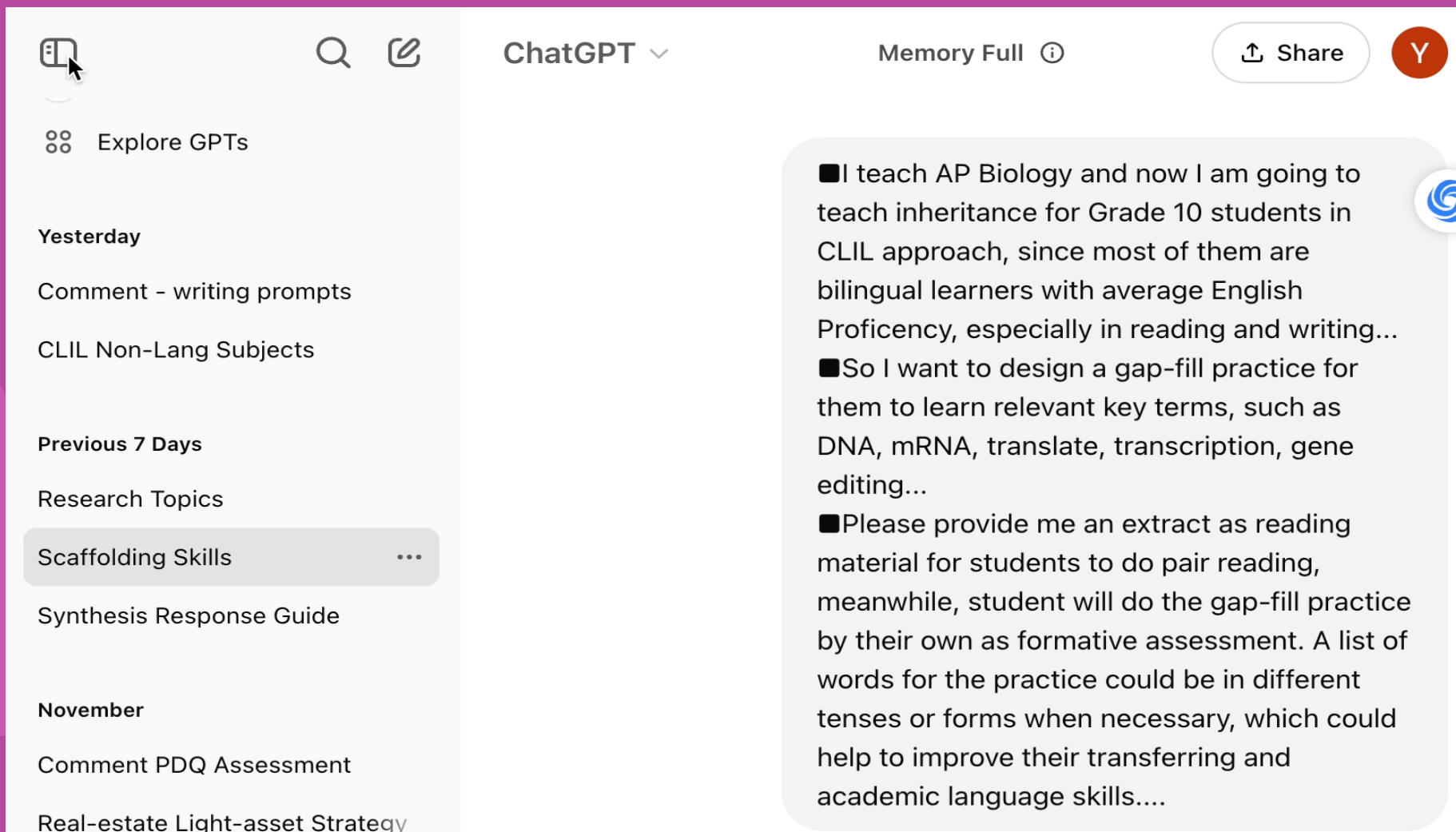
| Feature | Voltage-Gated Channels | Ligand-Gated Channels |
|----------------------|---|--|
| Triggering Mechanism | Open in response to changes in membrane potential | Open when a specific chemical ligand binds |
| Location | Primarily along the axon (axon hillock, nodes of Ranvier) | Located on the postsynaptic membrane at synapses |
| Speed of Response | Fast | Slower |
| Example | Na ⁺ channels, K ⁺ channels | ACh receptors, GABA receptors |

Fill in the Blanks

Task: Arrange the following steps of synaptic transmission in the correct order:

- Vesicle fuses with the presynaptic membrane, releasing acetylcholine (ACh) which diffuses across the synaptic cleft.
- Recycling of ACh, catalyzed by acetylcholinesterase, breaks ACh into acetate and choline, stopping continuous action potential production.
- Action potential arrives at the presynaptic neuron.
- Choline moves back into the presynaptic neuron to form new ACh.
- Na⁺ ions diffuse through the postsynaptic membrane, depolarizing it and generating a new action potential.
- Ca²⁺ ions diffuse into the presynaptic neuron, causing vesicles containing ACh to move towards the presynaptic membrane.
- Temporarily, ACh binds to receptor proteins on the postsynaptic membrane, opening ion channels for Na⁺ ions to enter.
- Ca²⁺ ion channels are opened, triggered by the action potential arriving at the presynaptic membrane.

Sample - Biology



The screenshot displays the ChatGPT web interface. On the left is a sidebar with a search icon, a share icon, and the text "ChatGPT" with a dropdown arrow. Below this is a "Memory Full" status indicator, a "Share" button, and a user profile icon labeled "Y". The sidebar contains a section "Explore GPTs" and two main categories: "Yesterday" and "Previous 7 Days". Under "Yesterday", there are three prompts: "Comment - writing prompts", "CLIL Non-Lang Subjects", and "Scaffolding Skills" (which is highlighted with a grey background and a three-dot menu icon). Under "Previous 7 Days", there are two prompts: "Research Topics" and "Synthesis Response Guide". At the bottom of the sidebar, there is a section for "November" with two prompts: "Comment PDQ Assessment" and "Real-estate Light-asset Strategy". The main chat area on the right contains three messages, each starting with a black square icon. The first message is: "I teach AP Biology and now I am going to teach inheritance for Grade 10 students in CLIL approach, since most of them are bilingual learners with average English Proficiency, especially in reading and writing...". The second message is: "So I want to design a gap-fill practice for them to learn relevant key terms, such as DNA, mRNA, translate, transcription, gene editing...". The third message is: "Please provide me an extract as reading material for students to do pair reading, meanwhile, student will do the gap-fill practice by their own as formative assessment. A list of words for the practice could be in different tenses or forms when necessary, which could help to improve their transferring and academic language skills....". A small blue circular icon with a white swirl is visible on the right side of the chat area.

ChatGPT

Memory Full

Share

Y

Explore GPTs

Yesterday

Comment - writing prompts

CLIL Non-Lang Subjects

Previous 7 Days

Research Topics

Scaffolding Skills

Synthesis Response Guide

November

Comment PDQ Assessment

Real-estate Light-asset Strategy

I teach AP Biology and now I am going to teach inheritance for Grade 10 students in CLIL approach, since most of them are bilingual learners with average English Proficiency, especially in reading and writing...

So I want to design a gap-fill practice for them to learn relevant key terms, such as DNA, mRNA, translate, transcription, gene editing...

Please provide me an extract as reading material for students to do pair reading, meanwhile, student will do the gap-fill practice by their own as formative assessment. A list of words for the practice could be in different tenses or forms when necessary, which could help to improve their transferring and academic language skills....

Key CLIL Strategies

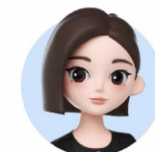
- Making Learning Interactive & Multimodal
 - Engage students through group activities, AI tools, and real-world examples.
 - *Example:* Instead of providing textbook stimuli, search for information of different cultural background
 - Case Study Jigsaw to structure each group studying one modal, providing frames for contrast and comparison
- **Supporting Output**

| | |
|----------------------|---|
| Step 4 (10 mins.) | <p>1. Teacher activity: Show the stimuli, ask the students to have their own FRQ questions. Set the students in different groups by connecting knowledge from different units.</p> <p>2. Student activity: Discuss and create question by group, then put the questions on padlet. Evaluate the questions of other group.</p> |
| Step 5 (12 mins) | <p>1. Teacher activity: Show the scaffolding sentence of creating FRQ question by asking AI.</p> <p>2. Student activity: Search for the result and put the questions on padlet. Evaluate the questions of other group.</p> |

Step 4 Create FRQ questions

I am a student who is reviewing AP Human Geography Unit 2, and I want to create FRQ about explaining reasons of different TFR of countries based on provided stimuli. Further, you need to provide relevant stimuli.


Command terms:
Identify ...
Define ...
Describe ...
Explain ...
Compare ...



Get the population data:

<https://population.un.org/wpp/>

QUICK NAVIGATION

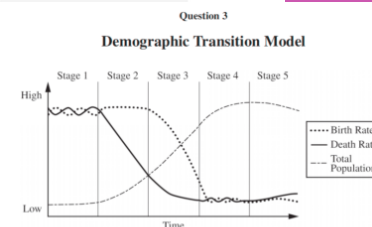
 Download Data Files
  Data Portal
  Graphs and Profiles
  Publications
  Data Sources

UN Population Division Data Portal
Interactive access to global demographic indicators

Search data by indicator and location

Indicators: Location:

[Get Selected and Download](#) [Select](#)



- In Stage __, the birth rate is __ because __.
- A major factor influencing the death rate is __.
- Compared to Stage __, Stage __ shows __ due to __.

Demographic Data for Selected Countries, 2019

| Country | Birth Rate | Death Rate | Population Over Age 65 |
|----------|------------|------------|------------------------|
| Croatia | 9 | 13 | 21% |
| Estonia | 11 | 12 | 20% |
| Germany | 9 | 11 | 22% |
| Greece | 8 | 12 | 22% |
| Japan | 7 | 11 | 28% |
| Portugal | 8 | 11 | 23% |
| Romania | 10 | 13 | 19% |

- After posing to Padlet, review other groups' stimulus and response to the questions.

DTM

deepseek

Key CLIL Strategies

- Assessing Both Content & Language Progress
 - Generate formative assessments tailored to student performance.
 - *Example:* After a lesson on urban challenges, students complete a self-reflection card
 - “One thing I learned about ...(topic) today is...(content) The discourse I should practice is...(language skill)”
- **Differentiation**

Section C: International option

Empire and the emergence of world powers, 1870–1919

3 Read the sources and then answer **both** parts of the question.

Source A

We wish in a spirit of good and mutual accord to regulate the conditions most favourable to the development of trade and civilisation in certain regions of Africa, and to improve the moral and material wellbeing of the native populations:

Article 1. The trade of all nations shall enjoy complete freedom.

Article 5. No Power shall be allowed to grant a monopoly.

Article 6. All the Powers bind themselves to watch over the interests of the native populations, to care for the improvement of the conditions of their moral, social and material life, and especially the slave trade. They shall, with the approval of the Powers, and in favour of all religious, scientific or charitable institutions, bring home to them the blessings of civilisation.

From the General Act of the Berlin Conference, 1884–1885

Source B

Some time ago, a party of men came to my country. They asked me for a place to dig for gold and said they would give me certain things for the right to do so. A document was written and presented to me for signature. I asked what it contained and was told that in it were my words and the words of those men. I put my hand to it. About three months afterwards I heard from other sources that, by that document, I had given away the right to all the minerals of my country.

I called a meeting of my advisors and also of the white men and demanded a copy of the document. It was proved to me that I had signed away the mineral rights of my whole country. I write to you that you may know the truth about this thing.

From a formal protest to Queen Victoria by Lobengula, King of the Ndebele, April 1889. His protest was ignored.

Source C

The Scramble for Africa by the nations of Europe was due to growing commercial rivalry for the only remaining fields for industrial enterprise and expansion. There are some who say we have no right to be in Africa, that it 'belongs to the native'. Our right is the need to provide for our ever-growing population, by opening new fields for emigration or work, and to stimulate trade by finding new markets, since trade depression brings misery at home.

While serving our own interest as a nation, we may also bring many advantages to Africa without depriving the natives of their freedom. It has been the British colonial method to rule by and through the natives, in contrast to Germany, France, Portugal and Spain. This has been the secret of our success as a colonising nation and has made us the most powerful nation in the world. It has also led to the rise in revolt against other nations.

From a speech by a British colonial administrator in Africa in 1903.

Source D

I have recently paid a visit, along with my wife, to Lukolela, and I saw such illegal and cruel deeds, that my blood boils with rage. My duty, which is truly the call of God, is to present this to you.

I met a Chief from Bokoko, who had been imprisoned to get three more baskets of rubber. Their tax of rubber has been doubled this year. Poor fellow! How thin he had become! He was wearing his State Chief's medal. He asked me to look at it. 'This,' he said, 'is how the State treats us: gives this medal, chains up the wearer and beats him. Do you wonder, Sir, that the natives hate the State?' He then asked if we did that sort of thing in our country. I replied we did not.

Again and again, I had the painful misfortune to meet men coming back from imprisonment on account of rubber.

From a letter to the General of the Belgian Congo Free State, by a Baptist Missionary, 1903.

Answer **both** parts of the question with reference to the sources.

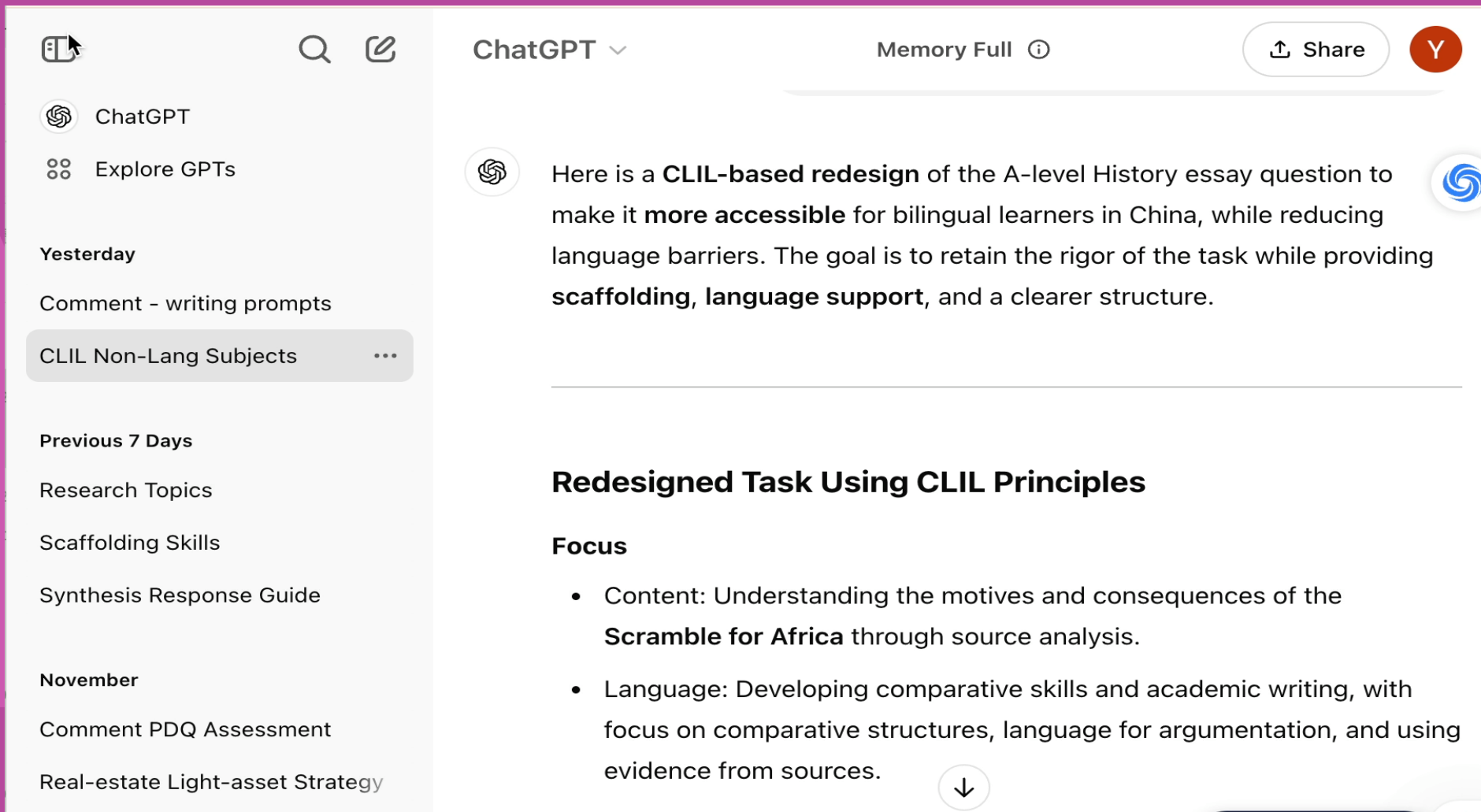
(a) Read Sources A and C.

Compare and contrast these two sources as evidence about the motives for the Scramble for Africa. [15]

(b) Read **all** of the sources.

How far do the sources support the view that people at the time believed that colonisation would be a disaster for the native populations? [25]

Sample - History



The screenshot displays the ChatGPT web interface. On the left is a sidebar with navigation options: 'ChatGPT' (selected), 'Explore GPTs', and a section for 'Yesterday' containing 'Comment - writing prompts' and 'CLIL Non-Lang Subjects' (highlighted with a grey background and a three-dot menu). Below this is a 'Previous 7 Days' section with 'Research Topics', 'Scaffolding Skills', and 'Synthesis Response Guide'. At the bottom is a 'November' section with 'Comment PDQ Assessment' and 'Real-estate Light-asset Strategy'. The main area on the right shows a chat with 'ChatGPT' where the user has asked for a 'CLIL-based redesign' of an A-level History essay question. The AI's response is visible, starting with 'Here is a CLIL-based redesign...' and followed by a section titled 'Redesigned Task Using CLIL Principles' with a 'Focus' section containing two bullet points. The interface includes a search icon, a share button, and a 'Memory Full' status indicator.

ChatGPT Memory Full Share Y

ChatGPT

Explore GPTs

Yesterday

Comment - writing prompts

CLIL Non-Lang Subjects

Previous 7 Days

Research Topics

Scaffolding Skills

Synthesis Response Guide

November

Comment PDQ Assessment

Real-estate Light-asset Strategy

Here is a **CLIL-based redesign** of the A-level History essay question to make it **more accessible** for bilingual learners in China, while reducing language barriers. The goal is to retain the rigor of the task while providing **scaffolding, language support**, and a clearer structure.

Redesigned Task Using CLIL Principles

Focus

- Content: Understanding the motives and consequences of the **Scramble for Africa** through source analysis.
- Language: Developing comparative skills and academic writing, with focus on comparative structures, language for argumentation, and using evidence from sources.

Mini-CLIL Challenge

Task: Write one question or discussion prompt that integrates both content learning and language support.

Example: Instead of “What causes deforestation?”, use “Deforestation occurs when _____. One example is _____.”

Please post it on Menti.

Key Takeaway

- 3 CLIL Moves
 - Support content AND language with scaffolds (e.g., sentence frames, visuals).
 - Engage students with interactive, real-world tasks.
 - Assess both content & language development.
 - Was there a question where you answered 'No' or 'Sometimes'? What's one small thing you could try to support students more?



Ready for
the world

Every teacher is a language teacher.
CLIL makes content accessible while
improving students' language
confidence!

Yaxin 😊



CAMBRIDGE

Any questions?

1. Coyle, D., Hood, P., & Marsh, D. (2010). CLIL: Content and Language Integrated Learning. Cambridge University Press.
2. Gibbons, P. (2002). Scaffolding Language, Scaffolding Learning: Teaching English Language Learners in the Mainstream Classroom. Heinemann.
3. Wright, W. E. (2010). Foundations for Teaching English Language Learners: Research, Theory, Policy, and Practice. Caslon Publishing.
4. Misconceptions in Learning: Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How People Learn: Brain, Mind, Experience, and School. National Academy Press.
5. Hattie, J., & Timperley, H. (2007). The Power of Feedback. Review of Educational Research.



Get in touch!

+86 18320183625

sunyaxin@brightscholar.com

cambridge.org/internationaleducation

© Cambridge University Press & Assessment 2024