Title: A study on How to Use Al Apps to Assist Teachers in Designing Reading Tasks for Advanced Learners (C1–C2)

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1. Introduction

The importance of reading in advanced English learning can not be denied. Reading at advanced levels unlocks tricky vocabulary, complex grammar, and deeper cultural insights. It sharpens critical thinking and fosters academic or professional fluency. Engaging with challenging texts—such as scholarly articles, literary classics, and informed opinion pieces—enriches comprehension skills while expanding expression, making it indispensable for higher-level English mastery.

However, in the course of teaching reading for advanced learners, many teachers face challenges in creating authentic and level-appropriate reading tasks. Thus, there exists a need for an assistant whose role IA can assume. The adoption of advanced technology has resulted in substantial changes in language learning and teaching in various contexts since the turn of the century. Technological products of different kinds have all been predicted to revolutionize language learning and instruction, one of which is Artificial Intelligence (AI). This tool is remarkably changing the approach to variety of disciplines, including language instruction in education.

This study explores how AI applications can support teachers in designing effective and engaging reading tasks for learners at CEFR levels C1 and C2. It focuses on designing three types, including *gap filling, multiple matching, and gapped texts* using crude texts from various sources of materials. It evaluates the capabilities of popular AI tools (e.g., ChatGPT, QuillBot, Grammarly, and text simplifiers) and proposes best practices for incorporating them into advanced language instruction.

Keywords: ChatGPT, prompt crafting, critical AI literacy

2. Theoretical Background

2.1. CEFR descriptors for C1 and C2 reading skills.

Here are the CEFR descriptors for reading skills at levels C1 and C2, based on the CEFR Companion Volume (Council of Europe, 2020):

C1 — Proficient User (Effective Operational Proficiency)

Overall Reading Comprehension:

- Can understand a wide range of demanding, longer texts, and recognize implicit meaning.
- Can follow long and complex lines of argument in texts, provided the topic is reasonably familiar.
- Can understand specialized articles and longer technical instructions, even when they do not relate to their field.

Specific Descriptors:

- Can understand in detail a wide range of lengthy, complex texts likely to be encountered in social, professional, or academic life, identifying finer points of detail including attitudes and implied as well as stated opinions.
- Can recognize a wide range of idiomatic expressions and colloquialisms, appreciating shifts in style and register.
- Can understand the meaning of complex technical information, such as operating instructions, specifications, and contracts.
- Can appreciate differences in style and register and recognize rhetorical devices like irony, understatement, and metaphor.

C2 — Proficient User (Mastery)

Overall Reading Comprehension:

 Can read with ease virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialized articles, and literary works.

Specific Descriptors:

- Can understand and interpret critically virtually all forms of written texts, including literary, technical, and theoretical writing, regardless of complexity or topic.
- Can distinguish finer shades of meaning even in the most complex texts, including abstract or culturally nuanced material.
- Can identify the function and purpose of highly implicit texts, including irony, satire, and rhetorical argument.
- Can read with ease and at speed, adapting style and strategy according to the type of text (e.g., skimming, scanning, close reading).

2.2. Principles of reading task design

Designing effective reading tasks—especially for advanced learners such as those at the C1 and C2 levels of the CEFR—requires careful consideration of several pedagogical principles. Three core principles to consider are:

- Text Selection
- Cognitive Demand
- Task Types (e.g., Skimming, Scanning, Inference, Critical Thinking)

Below is an in-depth overview of each principle with practical applications:

1. Text Selection

Text selection lays the foundation for an effective reading task. At the C1–C2 level, learners are expected to comprehend complex, abstract, and nuanced texts. The chosen text should challenge them linguistically and intellectually.

Key considerations:

Authenticity: Use real-world texts (e.g., newspaper articles, academic essays, reports) rather than heavily simplified ones. However, slight adaptation for length or clarity may be acceptable.

Genre and register: Include a variety of genres (narrative, argumentative, descriptive, expository) and registers (formal, informal, academic, journalistic).

Topic relevance: Choose topics that are intellectually engaging and culturally diverse, such as ethics, science, globalization, or technology.

Text complexity:

- Vocabulary: Include idiomatic expressions, phrasal verbs, and less common lexis.
- Grammar: Include complex structures (e.g., inversion, conditionals, passive forms, embedded clauses).
- Structure: Cohesive devices, argumentation patterns, rhetorical questions, counterarguments.

Examples:

C1: An editorial on climate change policy

C2: An academic article on postmodernism in literature

2. Cognitive Demand

Cognitive demand refers to the level of mental processing required to complete a task. At higher CEFR levels, tasks should move beyond basic comprehension toward analysis, synthesis, and evaluation (aligned with Bloom's Taxonomy).

Cognitive levels in reading tasks:

- Remembering: Recognizing/recalling facts or ideas (e.g., who, when, where)
- Understanding: Summarizing, explaining, interpreting (e.g., gist, main idea)
- Applying: Using information in a new context

- Analyzing: Identifying relationships, structure, or argumentation
- Evaluating: Making judgments based on criteria (e.g., bias, reliability)
- Creating: Generating new perspectives or solutions based on the reading

Implications for task design:

C1 tasks should frequently require analysis and interpretation.

C2 tasks should regularly demand evaluation, inference, synthesis, and meta-cognitive reflection (e.g., "How would the author respond to this counterargument?").

3. Task Types:

A. Skimming - Reading for Gist (Global Understanding)

Purpose: Grasping the general idea of the text

Task examples:

- Choose the best title or heading for the passage.
- · Match paragraphs with main ideas.
- Identify the author's purpose or tone.

B. Scanning - Reading for Specific Information

Purpose: Locating a particular piece of information quickly

Task examples:

- Find a specific date, statistic, or name.
- Match questions to specific paragraphs.
- True/False/Not Given with precise details.

C. Inference - Reading Between the Lines

Purpose: Drawing logical conclusions not directly stated

Task examples:

- · What can be inferred about the author's attitude?
- · Which character is likely to disagree with the decision? Why?
- What assumption underlies this argument?

D. Critical Thinking - Evaluating and Synthesizing

Purpose: Judging the logic, credibility, and implications of ideas

Task examples:

- Identify bias, rhetorical devices, or unsupported claims.
- Compare the argument in the text with another perspective.
- Suggest how the information could be applied to another context.
- Debate or reflect on the ethical, social, or philosophical implications.

Integrated task example (C2):

Read a 500-word editorial on AI and education. Then:

- Summarize the main argument (skimming)
- Identify two pieces of evidence supporting the author's claim (scanning)
- Infer the author's stance on traditional education models (inference)

 Evaluate whether the argument is balanced or one-sided (critical thinking)

In short, effective reading task design for C1/C2 learners should combine:

- · Carefully chosen, authentic texts of sufficient linguistic and intellectual challenge
- Tasks higher-order that demand thinking skills (beyond comprehension)
- A variety of question types aligned with real-world reading purposes (e.g., skimming for gist, scanning for detail, inferring meaning, and critically evaluating content)

2.3. Role of AI in language education.

Al is transforming language education by offering personalized, efficient, and engaging learning experiences. Al-powered tools such as language chatbots, adaptive learning platforms, and automated feedback systems allow learners to practice speaking, writing, listening, and reading at their own pace. These tools analyze learner performance in real-time and adjust content difficulty accordingly, supporting differentiated Additionally, AI enables instant grammar correction, pronunciation feedback, and vocabulary enhancement, helping learners build confidence and fluency. For educators, AI streamlines lesson planning, assessment, and content creation. While not a replacement for human interaction, Al complements traditional teaching by providing data-driven insights and fostering autonomous learning. Its role is especially valuable in online and blended environments.

2.4. Recommended AI Tools

Tool Use

Text transformation, gap creation, paraphrasing, ChatGPT

distractor generation

Paraphrasing sentences to create multiple matching Quillbot

or heading options

Text Check CEFR level of words/sentences Linguatext Inspector

Google Docs ⁺Clean up grammar/syntax in student-facing materials

Grammarly

Diffit:

adjusts complexity of texts and generates

comprehension questions across proficiency levels.

QuestionWell / Quizizz AI: generates multiple-choice and matching items based on input texts.

3. Methodology

A qualitative review of AI tools was conducted, including ChatGPT, Twee, Diffit, and QuillBot. Criteria included alignment with C1-C2 text complexity, flexibility for specific task formats, and pedagogical usefulness.

- Al Application Selection: Three Al applications were chosen for this study based on their popularity and functionality in generating educational content. These include: Al-powered content generation tools Natural Language Processing (NLP) based task design platforms Adaptive learning systems
- Task Design: Teachers worked with the selected AI applications to design reading tasks for C1-C2 level learners. The tasks included gap-fill, multiple matching, and gapped text tasks.

4. Al in Practice:

4.1. Designing Reading Tasks

To assist teachers in designing **C1-C2 level reading tasks** from **plain texts** (e.g., newspaper articles, essays, academic texts), AI tools like ChatGPT, Quillbot, or other NLP-based platforms can be extremely useful. Prompt crafting shows the ability of teachers to ask ChatGPT to suit their teaching needs. The more specific a prompt is given, the more desirable outcome can be yielded. Here's a breakdown of how to use AI tools effectively for three types of reading tasks.

Gap-Filling (Open Cloze or Multiple-Choice Cloze)

What it involves:

Students fill in missing words or phrases. Gaps can test grammar, vocabulary, or discourse knowledge.

How to use AI:

Step-by-Step:

1. Input the full text into ChatGPT and give a clear prompt like:

"Create a C1-C2 gap-fill exercise (10 gaps) from the following text. Remove high-level vocabulary items or complex grammar structures. Provide an answer key."

2. Specify what you want to focus on, e.g.:

"Focus the gaps on C1-level collocations and phrasal verbs." "Include distractors for each gap for a multiple-choice version."

3. **Generate variations**:

Ask ChatGPT to generate:

- an open cloze version
- o a multiple-choice cloze version with 4 options per gap
- o a difficulty annotation for each gap if needed

4. Post-edit manually:

Review and fine-tune the gaps to match your curriculum or exam format.

Multiple Matching (Matching Headings or Statements to Paragraphs)

What it involves:

Students read a text and match questions (e.g. summaries, purposes, opinions) to sections of the text.

How to use AI:

Step-by-Step:

1. Paste your source text and prompt ChatGPT:

"Divide this text into 5 sections and write 10 (it can be varied) matching statements. One statement should not match (distractor). Level: C1/C2."

2. **Ask for specific focus**, like:

"Base statements on the main idea of each paragraph" "Include paraphrasing and inference in the options"

3. **Use**Al to rephrase:
Ask the Al to reword statements using C1/C2-level paraphrasing to increase challenge.

4. **Validate** with Bloom's taxonomy:
All can help classify each item (e.g., Remember, Understand, Apply, Infer) to ensure a range of cognitive skills.

Gapped Text (Paragraph Completion / Sentence Insertion)

What it involves:

Students must insert sentences or paragraphs into the correct place in a longer text.

How to use Al:

Step-by-Step:

1. Paste a coherent multi-paragraph text and prompt:

"Remove 7 sentences/ paragraphs from the text. Provide 8 options (1 distractors). Ask students to choose the correct sentence/ paragraph for each gap."

2. Ask for distractors:

"Make the distractors grammatically correct and thematically plausible."

3. **Request**Ask ChatGPT to generate a brief explanation for why each correct sentence fits, to use as teacher notes or answer key.

4. **Use GPT for linking devices**: You can ask AI to highlight cohesive devices (e.g. "this," "however," "as a result") that help guide correct placement.

4.2. Tips for Ensuring C1-C2 Level Difficulty

Feature How to Integrate via AI

Lexical challenge Ask for use of academic collocations, idioms, and topic-

specific vocabulary.

Cohesion & Focus gaps on discourse markers, referents, ellipsis,

Coherence substitution.

Inference & Use AI to rewrite statements so students must infer from

Rephrasing the text.

Distractors

Ask AI to generate plausible but incorrect answers that

test reasoning.

4.3. Pratice with actual reading tasks

4.3.1. Gap filling

Fill in each numbered gap from 1 to 10 with ONE suitable word Example Prompt (for ChatGPT): "Create a C1-C2 gap-fill exercise (10 gaps) from the following text. Remove high-level vocabulary items, focusing on collocations, fixed epressions, phrasal verbs or complex grammar structures. Provide an answer key."

Plain text 1.

Remote Work and the Future of Offices

Over the past decade, the trend toward remote work has steadily increased, but it was the COVID-19 pandemic that drastically accelerated its adoption. Companies around the world were forced to adapt to virtual collaboration tools, flexible schedules, and decentralized management. Now, several years after the initial shift, many organizations are debating whether to return to traditional offices, maintain hybrid models, or go fully remote. Proponents of remote work cite increased productivity, lower operational costs, and improved work-life balance. However, critics warn of decreased team cohesion, lack of mentorship opportunities, and the blurring of boundaries between personal and professional life. Tech giants like Google and Apple have proposed hybrid systems that combine in-office collaboration with the flexibility of remote days. Interestingly, some studies suggest that remote work may not be universally beneficial. While introverted and independent workers thrive, others struggle with motivation and loneliness. As organizations attempt to balance performance with employee satisfaction, the future of workspaces seems to hinge on adaptability and employee autonomy.

ChatGPT said:

Instructions: Fill in each numbered gap with ONE suitable word. The word must be grammatically correct and make sense in context.

Remote Work and the Future of Offices Over the past decade, the trend toward remote work has steadily increased, but it was the COVID-19 pandemic that drastically (1) ______ its adoption. Companies around the world were forced to adapt to virtual collaboration tools, flexible schedules, and decentralized management. Now, several years after the initial shift, many organizations are debating whether to return to traditional offices, (2) _____ hybrid models, or go fully remote. Proponents of remote work (3) increased productivity, lower operational costs, and improved work-life balance. However, critics warn of decreased team cohesion, lack of mentorship opportunities, and the (4) of boundaries between personal and professional life. Tech giants like Google and Apple have proposed hybrid systems that combine in-office collaboration with the **(5)** of remote days. Interestingly, some studies (6) _____ that remote work may not be universally beneficial. While introverted and independent workers thrive, others (7) with motivation and loneliness. organizations attempt to balance performance with employee satisfaction, the future of workspaces seems to (8) on adaptability and employee autonomy. Ultimately, the ability to remain agile in the face of evolving expectations

may (9) whether companies succeed in retaining top talent or (10)

behind in the competition for skilled professionals.

Suggesed answers:

- 1. accelerated
- 2. maintain
- 3. cite
- 4. blurring
- 5. flexibility
- 6. suggest
- 7. struggle
- 8. hinge
- 9. determine
- 10. fall

Plain text 2.

The Ethics of Genetic Editing

The advent of CRISPR technology has opened up previously unthinkable possibilities in genetic engineering. With the ability to edit genes quickly, precisely, and relatively cheaply, researchers can potentially eradicate hereditary diseases or even enhance human capabilities. While such breakthroughs inspire optimism, they also provoke serious ethical concerns.

One key dilemma is the distinction between therapy and enhancement. Should we limit gene editing to curing fatal illnesses, or can it be used to improve intelligence or physical ability? Furthermore, access to such technology could be restricted to the wealthy, leading to a new form of inequality—genetic privilege. Opponents argue that editing the human germline may have irreversible consequences for future generations, especially if errors occur. There's also concern about the "designer baby" phenomenon, where aesthetics or traits are chosen based on personal preference rather than medical need. As the line between science fiction and science reality blurs, society must determine how far it's willing to go in rewriting the human genome.

ChatGPT said:

Instructions: Fill in each numbered gap with ONE suitable word. The word must be grammatically correct and appropriate to the meaning of the sentence.

The Ethics of Genetic Editing

The advent of CRISPR technology ha	is opened up previously unthi	nkable
possibilities in genetic engineering. W	Vith the ability to edit genes o	ιuickly,
precisely, and relatively cheaply, rese	earchers can potentially (1) _	
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improve intelligence or physical ability	y?	
Furthermore, access to such technolog	gy could be restricted to the we	ealthy,
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Opponents argue that editing the hur	man germline may have (5) _	
consequences for future generations,	especially if errors occur.	
There's also concern about the "de	, ,	
aesthetics or traits are chosen based	on personal (6) rathe	er than
medical need.		
As the line between science fiction an	d science reality (7),	society
must determine how far it's willing to	go in (8) the human g	enome
The debate highlights the urgent nee	ed for clear global regulations	to (9)
scientific progress while avoid	ding ethical (10)	

1 ------

Suggesed answers:

- 1. eradicate
- 2. provoke
- 3. distinction
- 4. leading

- 5. irreversible
- 6. preference
- 7. blurs
- 8. rewriting
- 9. guide
- 10. pitfalls

4.3.2. Multiple matching

Example Prompt (for ChatGPT): "Here is a text of about 600 words. Please create a C1-level multiple matching task with 5 paragraphs and 10 statements. Make sure the statements require understanding of main ideas, details, inference, and some paraphrasing. Provide an answer key" Plain text 3.

Roland Paoletti An architect who revolutionized the lives of London's commuters.

Α

Roland Paoletti was the driving force behind the dramatic, award-winning stations on the £3 billion Jubilee Line Extension (JLE) to the London Underground system, the most ambitious building programme on the Tube for many decades. An irascible Anglo-Italian, Paoletti possessed the persuasiveness and tenacity to take on the vested political interests at play in the planning of the 10-mile Jubilee Line Extension to ensure good design and innovation. Historically, architects employed on Tube projects had been restricted to 'fitting out' the designs of railway and civil engineers with few or no aesthetic concerns, and whom Paoletti dismissed as visionless 'trenchdiggers. The Jubilee line would be unique in that for the first time the architects would be responsible for designing entire underground stations.

В

As the commissioning architect in overall charge, Paoletti's approach was to let light flood down into the stations along the line. The project's centrepiece was the extraordinary huge new station at Canary Wharf, designed by Norman Foster and Partners to handle up to 40,000 passengers an hour at peak times. 'Everybody keeps saying that it's like a cathedral; complained Paoletti.'They're wrong. It actually is a cathedral: Explaining his approach to designing underground stations, Paoletti likened the Jubilee line to architectural free-form jazz, the stations responding to their different contexts as dramatic variations on a theme. Instead of uniformity, Paoletti envisaged variety achieved in the beauty of raw materials like concrete, and the architectural power of simple, large spaces for robust and practical stations.

C

He procured the most talented individual architects he could find to design 11 new stations along the line, creating a unique variety of architectural statement pieces – notably different but all beautiful – in what had been a largely desolate stretch of urban east London. 'For the price of an underground ticket; he promised, 'you will see some of the greatest contributions to engineering and architecture worldwide' Paoletti's sweeping vision did not disappoint. With their swagger and individualism, the stations have been widely acclaimed as a tour de force in public transport architecture.

D

In pressing for a seamless marriage between architecture and engineering, Paoletti was concerned to make the stations pleasing to the eye, and the daily grind of commuters using them as uplifting an experience as possible. The result was generally reckoned to be the finest set of stations since the classic designs for the Piccadilly line by Charles Holden in the 1930s. In Holden's day, design stopped at the top of the escalators leading down to the platforms, a symptom of the Tube's tradition of treating architecture and engineering as separate disciplines. From the start, Paoletti promised 'a symbiosis of architecture and engineering' throughout. This is particularly evident at Westminster station, where Michael Hopkins solved structural difficulties by designing fantastic supporting structures redolent of science-fiction – what Paoletti called 'engineering that expresses itself as architecture... in which people can delight.'

Ε

He wanted the designs of the JLE stations to have a uniformity of voice, or, as he put it, 'a philosophical uniformity'. Paoletti contrasted the drama of MacCormac Jamieson Prichard's design for Southwark station with the vast glass drum of Ron Herron's Canada Water station, intended as a response to the area's bleakness, 'a big, splendid beacon that has transformed the area from a wasteland almost overnight' To critics who complained about the expense of these grand designs, Paoletti pointed out that the same cut-and-cover, box-station design that allowed his architects a free hand with their various structures also saved London Underground millions in tunnelling costs. 'In any case, he noted, 'you have to decide at the beginning whether you're going to see an underground station as a kind of vehicular underpass that happens to have people in it, or whether it's a building; a building with some other kind of job to do, like making people comfortable.'

ChatGPT said:

Below is a Multiple Matching task suitable for C1-level learners based on the given 600-word text about Roland Paoletti.

MULTIPLE MATCHING TASK (C1 LEVEL)

Instructions: Read paragraphs A–E and the statements 1–10 below. Match each statement with the correct paragraph (A–E). You can use each paragraph more than once.

Paragraphs:

- A. Paoletti's role and vision in the Jubilee Line Extension project
- B. Paoletti's design philosophy and aesthetic approach
- C. His collaboration with individual architects and resulting acclaim
- D. Integration of architecture and engineering, including references to earlier Tube designers
- E. Paoletti's desire for unified variety and defense against criticism Statements:
 - 1. He challenged previous conventions that limited the creative scope of architects working on the Underground.
 - 2. He compared the architecture of the Jubilee Line to a form of musical improvisation.
 - 3. He wanted the architecture to serve more than just a functional transport role.
 - 4. He made efforts to ensure that each station reflected its surrounding context.
 - 5. He used cost-saving construction methods to justify investment in design.
 - 6. He criticized the traditional separation between engineering and architecture on the Tube.
 - 7. He described one station's impact as having revitalized a formerly unappealing area.
 - 8. He ensured that top architects were brought on board to achieve a wide range of striking designs.
 - 9. He promoted the idea that architecture should enhance the daily lives of commuters.
 - 10. He rejected uniformity across stations in favor of varied designs that shared a deeper conceptual consistency.

Answer Key:

- 1. A
- 2. B
- 3. E
- 4. B
- 5. E
- 6. D
- 7. E
- 8. C
- 9. D
- 10. E

Skills Targeted:

- Statements 1, 6 → understanding of specific details (historical context)
- Statements 2, 4, 10 → inference and paraphrasing of ideas/analogies
- Statements 3, 5, 7, 8, 9 → recognition of main ideas, justifications, and implications

Plain text 4.

"Here is a text of about 600 words. Please create a C1-level multiple matching task with 5 paragraphs and 10 statements. Make sure the statements require understanding of main ideas, details, inference, and some paraphrasing. Provide an answer key.

Magnificent Metals

A. Indium

This silvery-white metal has become indispensable in our digital age, though few people know its name. A key component in touch screens and flat-panel displays, indium tin oxide creates the transparent conducting surface that makes these devices possible. The metal's unusual property of "wetting" glass - adhering perfectly to its surface - makes it ideal for this purpose. Its low melting point and malleability also make it perfect for creating low-temperature solders used in delicate electronic components. While not particularly rare in the Earth's crust, indium is never found in pure form and is typically extracted as a byproduct of zinc mining. Current concerns about supply chain security have led to increased efforts to recycle indium from discarded electronics, though the process remains challenging due to the tiny amounts present in each device. The metal's price volatility has caused considerable anxiety in the electronics industry, with some manufacturers actively searching for alternatives.

B. Tantalum

Named after the Greek mythological figure Tantalus, this bluish-grey metal has properties that make it nearly irreplaceable in certain applications. Its extraordinary resistance to corrosion from most acids and its high melting point (3017°C) make it ideal for use in surgical implements and chemical processing equipment. Perhaps its most crucial role is in electronic capacitors, where its ability to form an extremely thin, electrically insulating oxide layer allows for the miniaturisation of electronic devices. However, tantalum's mining has become controversial, with some deposits located in conflict zones, leading to increased emphasis on ethical sourcing. The metal's high density and bio-compatibility have also made it valuable in medical implants, where it shows remarkable resistance to body fluids and a low rejection rate. Recent research suggests tantalum might play a crucial

role in next-generation quantum computing devices, though these applications remain theoretical.

C. Vanadium

This silvery-grey metal might not be a household name, but its impact on modern infrastructure is profound. Most notably, vanadium's ability to form exceptionally strong alloys with iron has revolutionised steel production. Adding just 0.15% vanadium to steel creates an alloy 30% stronger than regular steel, making it crucial in construction and automotive applications. The metal's variable oxidation states also make it valuable in flow batteries, potentially solving one of renewable energy's biggest challenges: large-scale energy storage. Interestingly, vanadium was discovered twice - first in Mexico and later in Sweden - due to its ability to mask its presence in compounds. Some sea creatures, particularly sea squirts, concentrate vanadium in their bodies for reasons that continue to puzzle scientists. Environmental concerns about vanadium mining have led to innovative biomining experiments using specially adapted bacteria.

D. Rhenium

One of the rarest stable elements in Earth's crust, rhenium's scarcity is matched only by its usefulness in specialized applications. Its extraordinarily high melting point (3186°C) and resistance to heat deformation make it crucial in jet engine components, where it allows turbine blades to operate at higher temperatures, increasing engine efficiency. Rhenium's unique properties also make it valuable as a catalyst in petroleum refining, where it helps produce high-octane gasoline. The metal was the last naturally occurring element to be discovered, and annual global production remains tiny - less than 50 tonnes. Despite its rarity, rhenium can be efficiently recycled from used engine components, helping to maintain a stable supply for critical applications. The aviation industry's push toward electric propulsion might eventually reduce demand for rhenium, though experts predict this shift is still decades away.

E. Hafnium

This shiny, silvery metal has become crucial in the semiconductor industry, though it remains virtually unknown to the public. Hafnium's high thermal stability and ability to form excellent electrical insulators make it essential in advanced computer chips, where it helps prevent electrical leakage at the nanoscale level. Found naturally occurring with zirconium, from which it is difficult to separate, hafnium also excels at absorbing neutrons, making it valuable in nuclear reactor control rods. The metal's high melting point (2233°C) and resistance to corrosion also make it useful in plasma cutting tools and super alloys. Interestingly, hafnium wasn't successfully isolated until 1923, despite being predicted by Mendeleev's periodic table decades earlier. The growing demand for smaller and more powerful processors has

made hafnium increasingly strategic, with some countries declaring it a critical resource for national security.

ChatGPT said:

Below is a C1-level Multiple Matching reading task based on your text "Magnificent Metals." The task includes five paragraphs (A-E) and ten statements. Learners must match each statement to the correct paragraph.

The task focuses on:

- Identifying main ideas
- Understanding supporting details
- Making inferences
- Recognizing paraphrased content

MULTIPLE MATCHING TASK - C1 LEVEL

Instructions:

You are going to read a text about five different metals. Match each of the following statements (1-10) with the correct paragraph (A-E). Each paragraph may be used more than once.

Paragraphs:

A. Indium
B. Tantalum
C. Vanadium
D. Rhenium

E. Hafnium

Statements:

- 1. This metal is extracted as a secondary product rather than being mined directly.
- 2. This metal plays a key role in enabling miniaturised modern technology due to its insulating properties.
- 3. The high cost of this metal causes uncertainty in an industry that depends on it.
- 4. Scientists are still unsure why some marine animals store this metal in their bodies.
- 5. This metal's unique resistance to extreme heat has made it essential in the aerospace industry.
- 6. There are concerns about the environmental or ethical implications of how this metal is sourced.
- 7. Despite being predicted long ago, this element was only discovered in the 20th century.
- 8. This metal may one day contribute to future computing technologies that are still in the research phase.
- 9. An extremely thin oxide layer makes this metal perfect for storing and releasing electrical charge.

10. This metal is increasingly viewed as strategically important for national technological competitiveness.

Answer Key:

- 1. A (Indium)
- 2. E (Hafnium)
- 3. A (Indium)
- 4. C (Vanadium)
- 5. D (Rhenium)
- 6. B (Tantalum) and C (Vanadium) Accept either
- 7. E (Hafnium)
- 8. B (Tantalum)
- 9. B (Tantalum)
- 10. E (Hafnium)

Notes for Teachers:

- Statements 2 and 10 test recognition of paraphrased phrases like "electrical insulators" and "critical resource."
- Statement 6 is flexible because both tantalum and vanadium paragraphs mention ethical/environmental concerns.
- Paragraphs are rich in content and suitable for follow-up critical thinking or writing tasks (e.g. "Which metal seems most important in future technology?")

4.3.3. Gapped text

Example Prompt (for ChatGPT): Design a gapped text task with answer keyt: In the following text, seven paragraphs (not sentences) have been removed. Above the extract you will find the seven removed paragraphs PLUS one paragraph which doesn't fit. Choose from the paragraphs (A-H) the one which fits each gap in the text (1-7). Remember, there is one extra paragraph you do not need to use. Write only the correct letter in the empty boxes in the text. Use these paragraphs to fill the spaces below. There is one extra you do not need to use.

Plain text 5

The Libyan oil industry is in the midst of its worst crisis since the 2011 civil war because of lawlessness and strikes at major petroleum facilities.

In the latest disruption, security guards re-imposed a strike they called off over the weekend, forcing the closure of Libya's two main crude oil export terminals.

Operations had resumed on Sunday at the ports of Es Sider and Ras Lanuf after a two-week stoppage. The two ports have a combined export capacity of around 600,000 barrels per day.

The work stoppage came just hours after gunmen wounded a guard and ransacked an oil service center Sunday evening in the eastern oasis town of Awjila. Libyan officials said they believe the attack was linked to competition between militia groups over oilfield contracts and the placement of their members in the newly created national Petroleum Facilities Guard, a force under the direct authority of the Defense Ministry, but made up largely of former militia members who have often fought among themselves.

Last week, Libyan Prime Minister Ali Zeidan warned of the economic consequences of the off-and-on disruption to oilfield, production and export terminals. He said oil exports had plunged by 70 percent - a devastating financial setback for Libya, which relies on oil exports for nearly all of its foreign revenues.

Oil industry officials said the export terminals at the Es Sider, Amna and Sirtica oilfields had already filled up their storage tanks to capacity and had to shut down production.

Libya's oil minister said Monday the government was working to end the disruptions by meeting with the protesters and appointing a new head of the Petroleum Facilities Guard - but that appointment also appears to have enraged some of the strikers.

"Groups closed the ports of Ras Lanouf, Zeuitina, Al-Sedra and Al-Hariga, forcing a drop in production to less than 30 percent of normal levels," Zeidan told reporters.

Over the past few months the oilfields and export terminals have been affected by everything from striking security guards to militias fighting over who should get security contracts. There also has been criminal looting at petroleum service centers and production facilities and fears of terrorist activity by al-Qaida or other jihadist groups. A surge in bombings, assassination and a mass jail breakout in the country's second-largest city, Behghazi has added to the insecurity.

According to the country's oil minister, Abdelbari al-Aroussi, Libya is now only exporting 330,000 barrels through the port at Zawiya, the one remaining export terminal that so far has been free of disruption or strike activity by guards demanding back pay and better salaries

Oil accounts for more than 80 percent of Libya's gross national production and more than 95 percent of exports. The country's oil production stood at 1.6 million barrels a day just before the 2011 uprising that toppled

Muammar Gaddafi. During the NATO-backed uprising oil production it shrunk to just 60,000 barrels a day, according to the International Energy Agency.

Libya's transitional authorities were quick to encourage foreign oil companies and the Libyan National Oil Corporation to resume production quickly after fighting stopped. In the autumn of 2011, to the surprise of foreign oil experts, they claimed production almost matched pre-war levels.

But oil industry insiders told VOA they thought the numbers were exaggerated and output was at least a quarter of a billion barrels a day short of government claims. Some still remain skeptical about government figures.

"It isn't that hard to play around with the numbers," said a foreign oil consultant, who declined to be named, fearing to do so could jeopardize his future work for Libya's National Oil Corporation. "Production did resume quite quickly because everyone took a short cut when it came to repairs and delayed replacing pipelines and equipment that are past their optimum life spans."

Security issues and the resulting supply disruptions plaguing Libya's oil industry are deterring some major foreign oil companies from competing for contracts to manage the fields, say oil analysts. Industry experts say some oil majors such as Royal Dutch Shell have been cautious about bidding for contracts or expanding operations in Libya.

Although denying it was pulling out of Libya, late last year Shell suspended some exploration projects in the country, arguing the results had been disappointing. Industry insiders say a key reason for that decision revolved around security concerns.

"Shell wants a stable security environment - and they aren't the only ones worried about strikes, opportunistic gun attacks and spotty security. No one wants to see a repeat of the al-Qaida attack earlier this year in Algeria," said a foreign oil consultant, who has reviewed the workings of the recently created Petroleum Facilities Guard.

"The Libyan government is still a long way from consolidating control of the country's oilfields, pipelines and ports," he says.

ChatGPT said

Certainly! Below is a complete gapped text task based on your input, designed for upper-intermediate to advanced English learners (CEFR B2-C1 level). It includes:

- Clear instructions
- The main text with seven gaps
- Eight paragraphs (A-H), one of which is extra and does not fit
- Answer key with explanations



GAPPED TEXT TASK: Matching Paragraphs

INSTRUCTIONS: The text below has seven gaps (1-7). After the text, you will find eight paragraphs (A-H). Seven of these paragraphs fit into the correct gaps in the text. One paragraph is extra and does not fit anywhere. Match each gap with the correct paragraph. Write the letter of the paragraph (A-H) in the space provided. There is one extra paragraph you do not need to use.

TEXT:

The Libyan oil industry is in the midst of its worst crisis since the 2011 civil war because of lawlessness and strikes at major petroleum facilities.



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(4)

Libya's oil minister said Monday the government was working to end the disruptions by meeting with the protesters and appointing a new head of the Petroleum Facilities Guard – but that appointment also appears to have enraged some of the strikers.

(5)

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Oil accounts for more than 80 percent of Libya's gross national production and more than 95 percent of exports. The country's oil production stood at 1.6 million barrels a day just before the 2011 uprising that toppled Muammar Gaddafi. During the NATO-backed uprising, oil production shrank to just 60,000 barrels a day, according to the International Energy Agency.

(7)

"The Libyan government is still a long way from consolidating control of the country's oilfields, pipelines and ports," he says.

PARAGRAPHS: (Choose from A-H)

A. According to the country's oil minister, Abdelbari al-Aroussi, Libya is now only exporting 330,000 barrels through the port at Zawiya, the one remaining export terminal that so far has been free of disruption or strike activity by guards demanding back pay and better salaries.

- B. But oil industry insiders told VOA they thought the numbers were exaggerated and output was at least a quarter of a billion barrels a day short of government claims. Some still remain skeptical about government figures.
- C. Groups closed the ports of Ras Lanouf, Zeuitina, Al-Sedra and Al-Hariga, forcing a drop in production to less than 30 percent of normal levels," Zeidan told reporters.
- D. Libya's transitional authorities were quick to encourage foreign oil companies and the Libyan National Oil Corporation to resume production quickly after fighting stopped. In the autumn of 2011, to the surprise of foreign oil experts, they claimed production almost matched pre-war levels.
- E. Oil industry officials said the export terminals at the Es Sider, Amna and Sirtica oilfields had already filled up their storage tanks to capacity and had to shut down production.
- F. Although denying it was pulling out of Libya, late last year Shell suspended some exploration projects in the country, arguing the results had been disappointing. Industry insiders say a key reason for that decision revolved around security concerns.
- G. "It isn't that hard to play around with the numbers," said a foreign oil consultant, who declined to be named, fearing to do so could jeopardize his future work for Libya's National Oil Corporation. "Production did resume quite quickly because everyone took a short cut when it came to repairs and delayed replacing pipelines and equipment that are past their optimum life spans."
- H. Security issues and the resulting supply disruptions plaguing Libya's oil industry are deterring some major foreign oil companies from competing for contracts to manage the fields, say oil analysts. Industry experts say some oil majors such as Royal Dutch Shell have been cautious about bidding for contracts or expanding operations in Libya.

ANSWER KEY:

$1 \rightarrow C$

Justification: This paragraph directly refers to the port closures mentioned earlier and introduces the scope of production loss, logically fitting after the statement of industry crisis.

$2 \rightarrow E$

Justification: This paragraph explains why production had to stop again: storage tanks were full, giving a direct consequence to the resumed operations.

$3 \rightarrow A$

Justification: The minister is quoted in the main paragraph, and A provides a specific update on current exports and the relatively unaffected Zawiya port.

$4 \rightarrow F$

Justification: Fits with the mention of a new appointment causing unrest and offers insight into oil company responses.

$5 \rightarrow H$

Justification: Expands on the consequences of insecurity and disruption for foreign companies; logical continuation from militia activity.

$6 \rightarrow D$

Justification: Chronological continuation—after presenting the fall during the war, this shows the attempted recovery.

$7 \rightarrow B$

Justification: This expresses skepticism over official numbers, matching the closing quotation tone of the preceding paragraph and the expert analysis in the final sentence.

EXTRA PARAGRAPH (Not Used): G Reason: G is more focused on insider opinions and technical shortcomings in oil infrastructure; while relevant, it does not fit as well contextually into any of the seven clear narrative threads.

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Plain text 6

The Farm

The unpredictable nature of growing crops has always pushed farmers to try the latest technology. Once, that involved switching from horse-drawn plows to gasoline-powered engines in tractors and combines. Now, it includes big data, cloud computing, and iPads. Just ask Joe Sullivan. He's in charge of technology for JR Farms. He started out 15 years ago collecting yield data from his combine. Back then, in order to connect the yield to a spot on the field, he had to use FM radio transmitters to try to improve the accuracy of GPS.

The setup provided accuracy within about a foot on the field. However, driving the combine past a metal barn would badly skew the location results, sometimes by miles. Today, the GPS he uses is accurate to the inch.

He's able to collect a rich stream of data from his harvester about soil, elevation, moisture, and yield. He transfers information collected by the harvester to machines that spread fertilizer and seed, which adjust themselves to apply less in areas that consistently have a lower yield, saving money.

Likewise, the spreaders apply more fertilizer in areas that are measurably more productive, in hopes of boosting yields further. Because the data is stored in the cloud, he can access analyses from an iPad in the fields.

This means he can stand in a problem area and look up what kind of seed he used and how much fertilizer he applied at that precise spot. Cloud storage also makes him less worried about a hardware failure on his home computer that could erase this valuable information.

Sullivan is a very early adopter. Only a small number of farmers engage in similar precision agriculture. The USDA reports that in 2006, the most recent survey year, adoption of yield monitoring equipment was around 45 percent, but use of GPS and technology that applies fertilizer at variable rates was closer to 15 percent.

Since farmers tend to work on a 20-year upgrade cycle, things might not have changed all that much, says Melissa Lloyd, a consultant who has been tracking technology and agriculture for Lloyd Advisors.

Even farmers who use that combination of technology rely on a thumb drive to transfer data from the combines to computers in their homes, where they use local software to develop prescriptions for their planter and fertilizer machines.

The cloud-based technology Sullivan uses – taking some of the work out of analyzing the stream of measurements and allowing for real-time and ubiquitous access to the data – has only been around for about a year.

No one has a good count of how many farmers seed their fields from these cloud services, but many farmers are talking about it. The vendors say it can take some of the headache out of managing the technology required for the most sophisticated forms of precision agriculture.

As much as farmers discuss the potential behind the new cloud-based services, they're now also talking about the downsides, which mean that in some cases, the services require them to relinquish control of their data to huge agribusinesses.

Some farmers are worried about the implication of buying data services from a multinational that sells an array of farm inputs, which is the term farmers use to describe goods they have to buy, such as seed, fertilizer, and pest-control products.

There is some consternation amongst farmers that they will get locked in to one system, where they're almost forced to buy what they need from them because that's where the recommendations, based on the data, are coming from.

That would allow the company to raise prices on inputs based on the data they're seeing from farms. The farmers see things differently. They are prepared to share the data and see if the concept is feasible, but the first time they see a purposeful price increase around harvest time, they intend to bail.

ChatGPT said

Sure! Below is a complete Gapped Text task designed in the style commonly found in advanced English language exams like Cambridge C1 Advanced (CAE) or C2 Proficiency (CPE). The task includes:

- A main text with seven gaps (labeled 1-7)
- Eight paragraphs labeled A-H (one of which is a distractor)
- Answer key at the end

Reading Comprehension Type: Gapped Paragraph Insertion (C1-C2 level) Topic: Precision Agriculture & Big Data in Farming Task Type: Match the missing paragraphs (A-H) to gaps (1-7) in the main text.

INSTRUCTIONS:

You are going to read an article about the use of modern technology in farming. Seven paragraphs have been removed from the text. Choose from

the paragraphs A-H the one that fits each gap (1-7). There is one extra paragraph you do not need to use.

Write only the correct letter (A-H) in the blank spaces.

THE FARM

The unpredictable nature of growing crops has always pushed farmers to try the latest technology. Once, that involved switching from horse-drawn plows to gasoline-powered engines in tractors and combines.

Now, it includes big data, cloud computing, and iPads. Just ask Joe Sullivan. He's in charge of technology for JR Farms. He started out 15 years ago collecting yield data from his combine. Back then, in order to connect the yield to a spot on the field, he had to use FM radio transmitters to try to improve the accuracy of GPS.

The setup provided accuracy within about a foot on the field. However, driving the combine past a metal barn would badly skew the location results, sometimes by miles. Today, the GPS he uses is accurate to the inch. [3]

He's able to collect a rich stream of data from his harvester about soil, elevation, moisture, and yield. He transfers information collected by the harvester to machines that spread fertilizer and seed, which adjust themselves to apply less in areas that consistently have a lower yield, saving money.

[4]

[6]

Likewise, the spreaders apply more fertilizer in areas that are measurably more productive, in hopes of boosting yields further. Because the data is stored in the cloud, he can access analyses from an iPad in the fields. [5]

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PARAGRAPHS TO CHOOSE FROM:

- A. Still, Sullivan represents just one end of a broad spectrum. While he's moved his farm's decision-making tools entirely online, many others remain tied to older technologies or manual processes.
- B. The potential impact on efficiency is enormous. Farmers can track not only what is happening in the field but also predict outcomes and make data-driven decisions in real time.
- C. For farmers like Sullivan, this new level of precision is not just a technological leap—it's a competitive advantage that could mean the difference between profit and loss in a tough market.
- D. In fact, some worry that by giving corporations access to detailed field-level information, they may be surrendering control over both strategy and pricing.
- E. However, not all farmers are embracing the new cloud-based technologies with the same enthusiasm.
- F. These early struggles highlight just how far the technology has come in a relatively short time.
- G. She notes that even among those who adopt newer technologies, many remain hesitant to commit fully to systems they don't completely control.

H. This method, known as variable-rate application, aims to reduce waste and increase output by tailoring actions to specific parts of the field.

MANSWER KEY:

- 1. E
- 2. F
- 3. C
- 4. H
- 5. B
- 6. A
- 7. D

Would you like this in Word or PDF format for printing or sharing? I can also provide comprehension questions or vocabulary support for classroom use.

5. Findings

Benefits

- Time Efficiency: Al applications significantly reduced the time required for task design, allowing teachers to focus on other aspects of instruction.
- Personalization: Al-generated tasks could be tailored to meet the specific needs of individual learners or groups.
- Increased Engagement: Al-designed tasks offered a range of engaging formats and difficulty levels, potentially increasing student motivation. Challenges
- Accuracy and Quality: Ensuring the accuracy and quality of Al-generated content required careful evaluation and editing by teachers.
- Limitations in Contextual Understanding: Al applications sometimes struggled to fully understand the context of the text, leading to less relevant or accurate task generation.

6. Conclusion and Recommendations

This study highlights the potential benefits and challenges of utilizing Al applications in designing reading tasks for advanced learners. The use of Al significantly supports EFL teachers in planning and designing lessons, and applying the outcomes in lessons. EFL teachers can benefit a great deat from these tools as long as they possess specific Al competencies, such as prompt crafting to obtain useful and meaningful outputs, and critical thinking, together with EFL teaching knowledge, to recognize inaccuracies and identify relevant outcomes.

While AI can significantly enhance teaching efficiency and offer personalized learning opportunities, it is crucial for teachers to carefully evaluate and refine AI-generated contents to ensure its quality and relevance. Despite being a powerful assistant, Al not a replacement in our lesson plan. Therefore, teachers should combine pedagogical expertise with Al capabilities. An integration between Al-assisted and teacher-guided models is suggested.

- Teacher Training: Educators should receive training on effectively integrating AI applications into their teaching practices.
- Al Application Development: Future Al applications should prioritize contextual understanding and content quality to better support task design.
- Further research should evaluate student performance impacts and longterm integration of AI-enhanced task design.

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