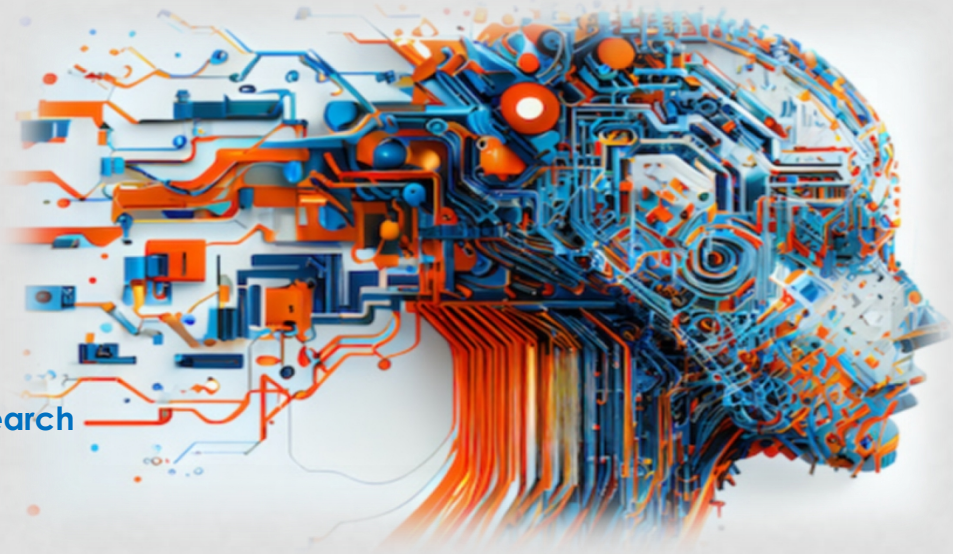
جامعة باتنة 1
University of Batna 1

SRL

ESP

English Teaching-Learning Research



TOWARDS PROGRESSIVE WEANING:

TRAINING STUDENTS TO USE GENERATIVE AI FOR SELF-REGULATED ESP LEARNING

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OUTLINE



1. Introduction
2. Literature review
3. Methodology
4. Key Findings
5. Study Implications

Conclusion & Future perspectives



1. INTRODUCTION



- Generative AI is transforming ESP teaching and learning.
- Teacher-guided AI can support students' learning autonomy, communication skills, and personalized learning.
- This study explores how structured GenAI use can promote self-regulated learning (SRL) and ethical AI use.

(SRL) is the ability to take control of and manage one's own learning through planning, monitoring, and evaluating progress.



2. LITERATURE REVIEW



1. Learning outcomes and personalisation

GenAI can support communication, writing, motivation, engagement, and personalised learning (Dou, 2024; Asrifan et al., 2025b; Malaeva et al., 2025).

2. The evolving role of teachers

Teachers act as facilitators, mentors, and ethical guides rather than being replaced by AI (Kong & Yang, 2024; Cogo et al., 2024; Tang et al., 2025; Yun, 2025).

3. Self-regulated learning (SRL)

GenAI can support planning, monitoring, evaluation, and reflection when combined with explicit SRL strategies (Panadero, 2017; Pan et al., 2025; Xu et al., 2026).

Research Gap

4. Ethical concerns and effective implementation

Risks include overreliance, inaccurate or biased outputs, plagiarism, and reduced critical thinking (Avsheniuk et al., 2025; Cogo et al., 2024; Giannakos et al., 2024).

5. Key message from previous research

- Access to GenAI alone does not guarantee self-regulated learning;
- Structured teacher guidance and explicit SRL strategies are essential (Kong & Yang, 2024; Tang et al., 2025; Pan et al., 2025; Xu et al., 2026).

3. METHODOLOGY





1. Research Design
2. Participants and Learning Context
3. GenAI-Supported Learning Environment
4. Experimental Procedure
5. Data Collection and Analytical Focus

Observation grid Dimentions:
SRL, communicative comptence, ethical Gen-AI literacy, learning personalization

1. A mixed-methods experimental approach examining the impact of teacher-guided, GenAI-supported ESP learning on self-regulated learning (SRL) and learner autonomy.
2. 56 third-year students from three disciplines at Batna 1 University, selected for their relatively low English proficiency.
3. Google's Gemini Notebook (formerly: Notebook LM). It enabled students to create, personalize, evaluate, and revise source-based ESP learning materials.
4. A seven-month intervention involving six student-selected themes (promote initial engagement), with three sessions per theme: workshops, presentations, and discussions.

   Four SRL stages—planning and goal setting, material generation and adaptation, critical evaluation, and reflection.
5. Structured observation and performance assessment, complemented by pre- and post-intervention open-ended questionnaires. Performance was assessed using a single overall score out of 20 per thematic activity.

Examples of students' generated courses (Grammar)

NotebookLM

Presentation

Your Guide to Daily English

Mastering the Present Simple Tense



Let's follow Alex through a typical day and learn how to talk about routines in English.

What is the Present Simple?

We use the Present Simple tense to talk about things that are always true or happen regularly. It's perfect for describing habits, routines, and facts.

Habits	Routines	Facts
(e.g., I drink coffee every morning.)	(e.g., The bus arrives at 8 AM.)	(e.g., The sun rises in the east.)

This lesson focuses on the third-person singular (he, she, it), which has special spelling rules.



Alex's Morning Begins

Alex wakes up at 7 AM.

He eats breakfast in the kitchen.

The Basic Rule

For most verbs with he, she, or it, we simply add -s.

Verb + s



Getting Ready

He brushes his teeth.

He washes his face.

The '-es' Rule

For verbs ending in **-ch, -sh, -s, -x,** or **-z,** we add **-es.**

watch -> watches, finish -> finishes

Work and Study



He goes to work.

*(goes follows the add **-es** rule for verbs ending in **-o**)*



He studies English in the evening.

The '-ies' Rule

For verbs ending in a **consonant + y**, we change the **y** to **i** and add **-es.**

study -> studies, tidy -> tidies

What About Everyone Else?

The '-s' ending is special. It's only for **he, she,** and **it**. For all other subjects, we use the base form of the verb.

He / She / It	I / You / We / They
He works.	I work.
She studies.	You study.
It eats.	We eat.
	They go.

A Day in the Life of Alex



1. He **wake**s up.
2. He **wash**es his face.
3. He goes to work.
4. He **finish**es at 5 PM.
5. He **studi**es for an hour.
6. He **watch**es TV.

Practice Time: Complete the Story

Let's talk about Alex's friend, Maria. Use the correct form of the verb in parentheses.

1. Maria _____ (work) at a hospital.
2. She _____ (help) many people.
3. She _____ (teach) new nurses.
4. At home, she _____ (relax) and _____ (read) books.
5. She _____ (try) to learn a new language.



Practice Time: Find and Fix the Mistake

Read the sentences below. One verb in each sentence is wrong. Find it and make it correct.

1. My brother **playes** the guitar very well.

1. My brother **playes** the guitar very well.

2. The train **arrive** at the station every hour.
3. She **washs** her car on the weekend.
4. He **flys** to different countries for his job.

Now, Your Turn! What About Your Day?

You have learned the rules from Alex's day. Now, try to write **3-5 sentences** about your own daily routine or the routine of a family member.



There is no single correct answer. This is your story!

Your Present Simple Cheat Sheet

Add -s

The Rule
Most verbs

Example
work -> works
eat -> eats
play -> plays

Add -es

The Rule:
Verbs ending in **-ch, -sh, -s, -x, -z, -o**

Example
watch -> watches
wash -> washes
go -> goes

Change y to i and add -es

The Rule:
Verbs ending in **consonant + y**

Example
study -> studies
try -> tries
cry -> cries

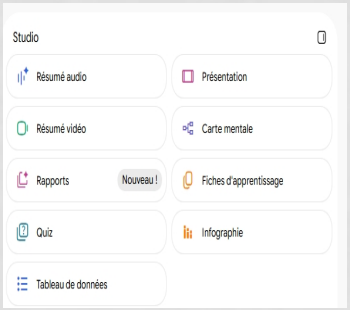
Remember: These rules are for **He, She,** and **It** only!

References

The grammatical rules and structures presented in this lesson are based on established English language teaching principles, as detailed in foundational texts such as:

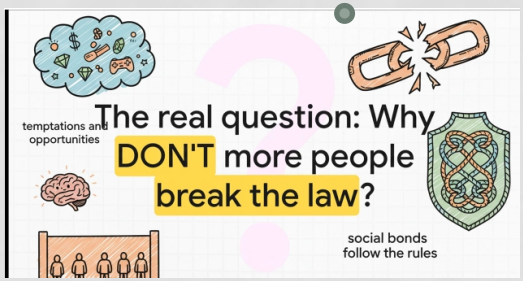
Azar, B. S., & Hagen, S. A. (2017). *Fundamentals of English grammar* (5th ed.). Pearson Education.

Examples of students' generated courses (ESP)

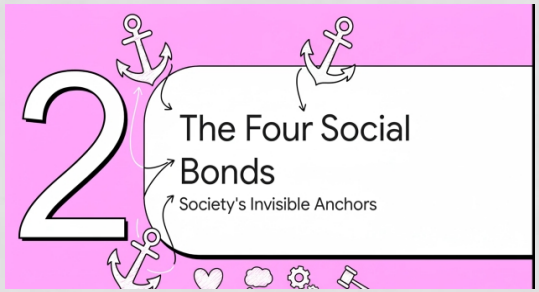


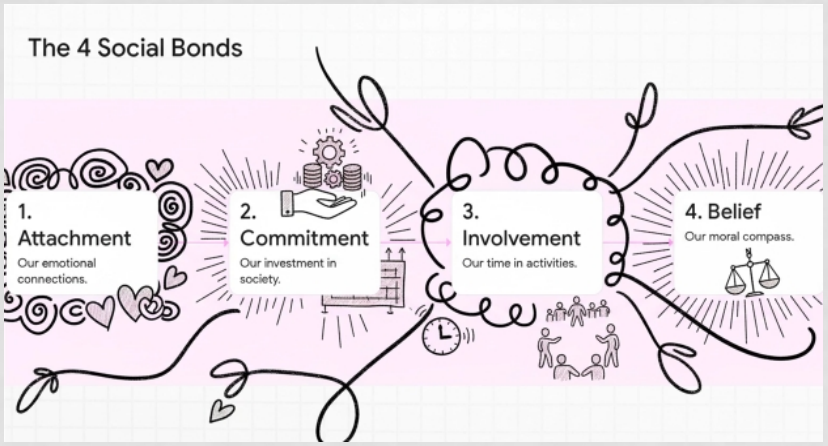


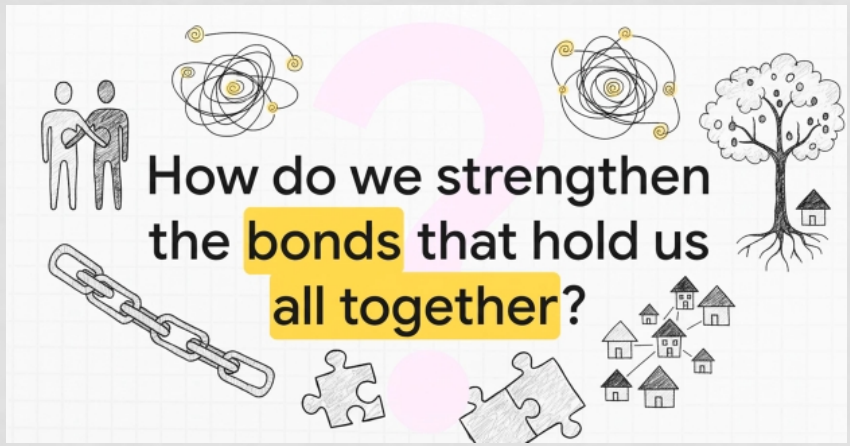














4. KEY FINDINGS

1. **Overall performance:** Increased from 6.86 to 10.52/20, with a statistically significant improvement and a large effect size. All 56 participants improved.

2. **Self-regulated learning and autonomy:** Students progressed from relying on ready-made AI answers to setting goals, formulating prompts, evaluating content, and reflecting on their learning. 83% reported improved identification of learning needs.

3. **Communicative competence:** 70% showed improvement in discipline-specific vocabulary, speaking, presentations, and writing.



Examples of errors and corrections related to cross- and disssiplinary Vocabulary

Status

Sociology

An individual's position or rank within a social structure.

Psychology

A person's perceived standing, prestige, or importance within a group, often influencing self-esteem and interpersonal relationships.

Incorrect use: "The patient's **status** was measured using a psychological test to determine their level of anxiety."
Corrected sentence: "The patient's psychological state was assessed using a test to determine their level of anxiety."

Socialisation

The lifelong process through which individuals learn and internalise the norms, values, beliefs, and behaviours of their society.

The term is also used, but it often refers more specifically to the development of social skills and the ability to interact with others.

Incorrect use: "Socialisation refers to the process through which individuals develop their personal identity and learn to manage their emotions."
Corrected sentence: "Socialisation is the process through which individuals learn and internalise the norms, values, beliefs and behaviours of their society."

Cross-disciplinary terms with descipline-specific meanings



4. **Ethical GenAI literacy:** Content-checking and verification increased from 45% to 82%. Moreover, 88% reported greater attention to verifying AI-generated information.

5. **Personalisation:** Students increasingly adapted learning materials to their needs, and 84% considered this feature particularly useful.

6. **Confidence and satisfaction:** 96.4% reported increased confidence, while 96.4% valued tailored materials and 92.9% appreciated self-paced practice.



5. STUDY IMPLICATIONS

1. **Pedagogical integration:** GenAI's educational value depends on thoughtful integration into teaching, rather than mere access to the technology.

2. **Teacher mediation**: Teachers should guide students through planning, monitoring, evaluation, and reflection, progressively transferring responsibility to learners.

3. **Self-regulated learning**: Structured GenAI use can foster autonomy, purposeful prompting, critical evaluation, and independent decision-making.



IMPLICATION



4. **Ethical AI literacy:** Students need to develop the skills to verify AI-generated information, identify inaccuracies, and use GenAI responsibly.

5. **ESP learning outcomes**: GenAI can support discipline-specific communication, personalised learning, and learner confidence when combined with active student engagement.

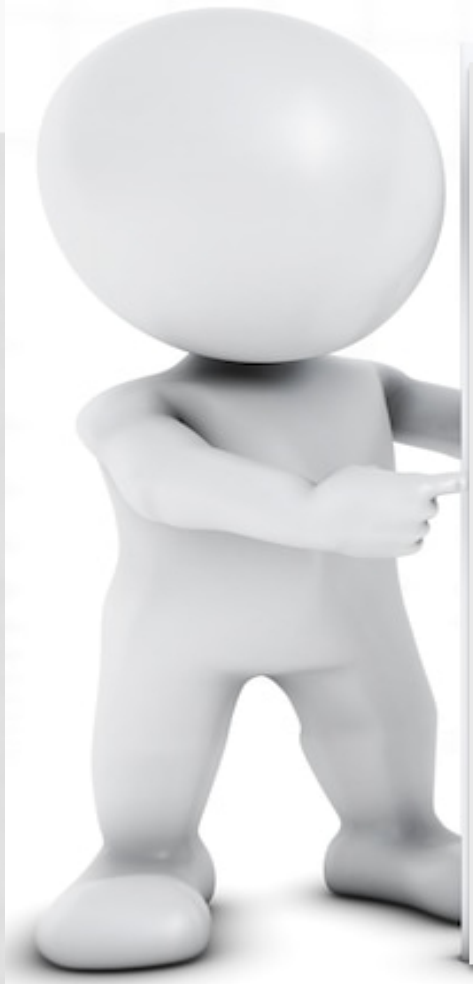
6. **Progressive weaning:** The ultimate goal is to move from teacher-dependent learning towards independent, self-regulated learning, with the teacher acting as a facilitator and ethical guide.

LIMITATIONS

- Aggregated scores → prevent separate analysis of each dimension.
- Single-faculty, single-university sample → limits generalizability.
- Reliance on self-reported data and a single GenAI tool.
- Listening and reading skills remain unexplored and require further investigation.

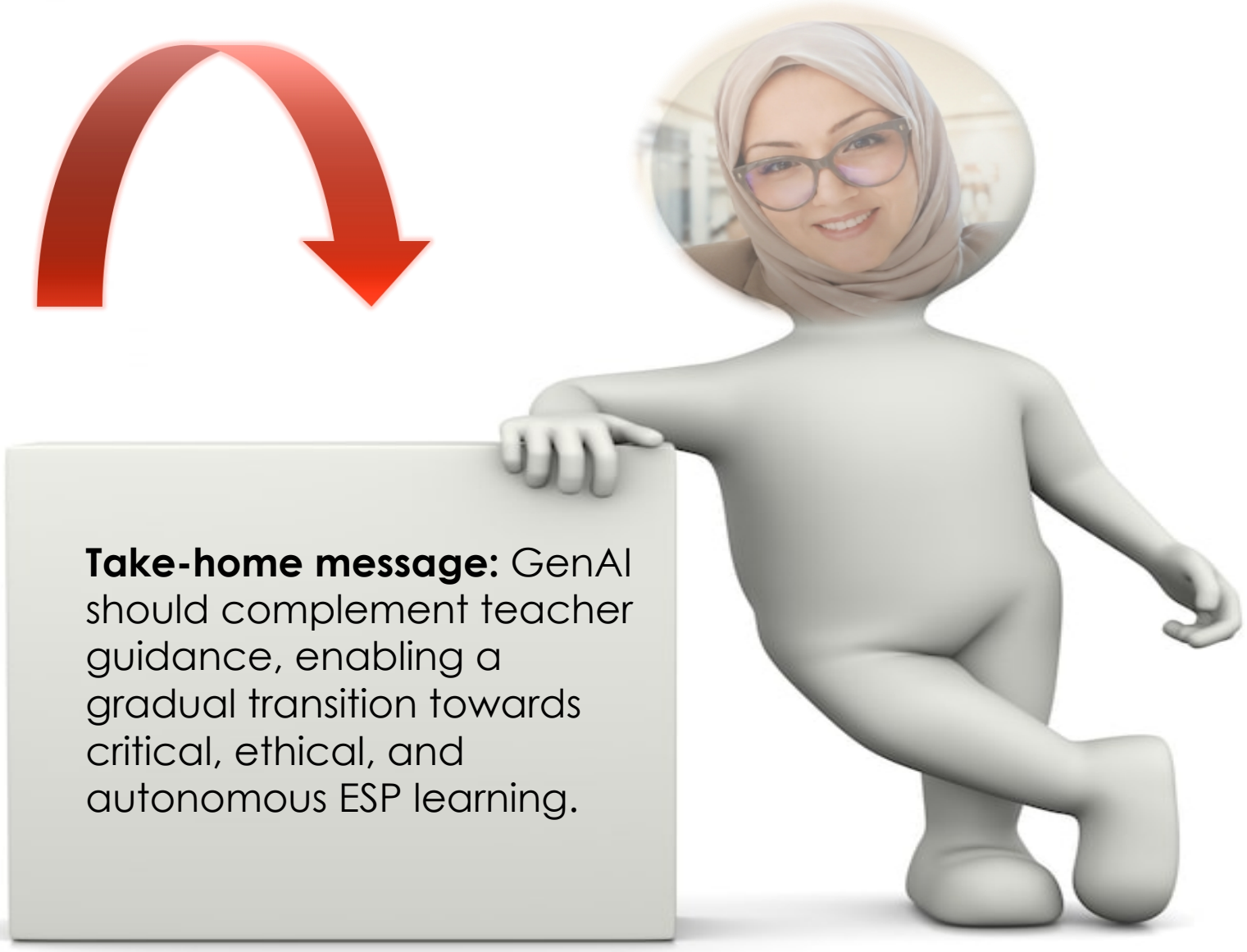


CONCLUSION



- GenAI can foster self-regulated learning, learner autonomy, communication skills, and personalised ESP learning.
- **Teacher mediation** remains essential for critical and ethical AI use.
- **Progressive weaning** gradually shifts responsibility from teacher to learner, promoting independent and responsible learning.




Take-home message: GenAI should complement teacher guidance, enabling a gradual transition towards critical, ethical, and autonomous ESP learning.

FUTURE PERSPECTIVES

1. **Long-term impact: Further research could examine whether students maintain their self-regulated learning skills and autonomy after teacher guidance is gradually reduced or withdrawn.**

2. Larger and more diverse samples: Future studies could involve students from different universities and academic disciplines to see whether the findings can be applied to other ESP contexts.

3. Comparative studies: Future research could compare teacher-guided GenAI learning with traditional ESP instruction or independent AI-assisted learning.

4. Broader assessment of language skills: Further studies could investigate the impact of GenAI-supported learning on the four language skills: speaking, writing, listening, and reading.

5. Ethical AI literacy and critical thinking: More research is needed to examine how students can develop responsible AI use, identify inaccurate or biased information, avoid overdependence, and maintain their critical thinking skills.

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