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**Title: Investigating Instructional Impact and Independent
Vocabulary Development: Word Choice in English Academic Writing
for College Students**

**Research Question: How can instructions and independent
vocabulary learning enhance students' lexical performance in
English academic writing?**

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1.Introduction

Writing is as an essential and comprehensive part for language acquisition, which is also considered as the most demanding and challenging task among all the academic activities.(Sajid, 2016; Yang & Qin, 2023) Driven by the internationalization of higher education and the global integration of academic research, the competence in English academic writing has become more critical than ever for college students.(Zou & Jiang, 2021)

Words are the smallest single units of meaning in the English language and serve as the building blocks of a piece of writing. Therefore, the very first step to produce a well-crafted academic writing is to “weigh one’s words”— a process formally named as diction or word choice. Its primary importance is also reflected in the design of the EAW course, which always schedules Word Choice as the first learning section. Word choice is a fundamental aspect of English academic writing, as it directly influences economy of expression, precision, and the overall tone and appeal of a text.(Malataliana-Tikoane, 2021)It is not just a grammatical issue that affects rhetorical effectiveness but also a carrier that conveys writers’ theory and standpoint.(Severino & Prim, 2015)

However, there are multiple difficulties of diction in English academic writing confronting non-native college students, such as concerns of lacking vocabulary, first language interference, misperception of academic style.(Severino & Prim, 2015; Thuy et al., 2022; Yang & Qin, 2023) In response to these issues, both in-class lexical instruction and out-of-class vocabulary accumulation are undoubtedly warranted, for they play complementary roles in developing students’ diction proficiency-while the former equips students with systematic diction-related concepts and skills, the latter assist to lay a foundation of word use and knowledge internalization, which is often not emphasized adequately in time-constrained curricula.(Chung et al., 2025)

Therefore, a study focusing on instructional impact and independent vocabulary development can offer insights into the teaching and learning of the established EAW course and concrete guidance for further improvement. This essay will carry out such a dual-perspective study by performing a lexical frequency analysis and AI-assisted assessment on students’ essays as well as examining statistics collected from a self-designed questionnaire, thus providing a reference for both instructors and learners.

This essay is intended to address the following research questions:

- To what extent do students apply the diction-related theories and strategies taught in class in their writing assignments?
- What are students’ independent vocabulary learning habits outside class, and

how do these relate to their lexical performance in academic writing?

- Based on the findings of the above questions, what practical advice can be offered to tutors and students to enhance vocabulary learning in the context of EAW?

2. Literature Review

2.1 Word choice and academic vocabulary

Word choice, or diction, means “the choice of words employed by the writer, particularly the extent to which the words the writer uses are thought suitable and effective for different kinds of writing”.(Richards & Schmidt, 2013)The academic assessment of diction follows three criteria, i.e. being correct in grammar, accurate in meaning and effective in style. Strategies are employed to achieve the above criteria, such as learning about the register, denotation, connotation and collocation of each word, nominalization and lexical variation showing the right intensity scale and formality level.(Danglli & Abazaj, 2014)Moreover, appropriate diction serves as a basis of syntactic constructions like modifier phrases and noun cluster, and is influenced by them in turn. In conclusion, word choice in academic writing is actually a rigorous and complex decision-making process, arousing researchers’ interest in developing an academic vocabulary for reference.

Academic vocabulary refers to “the most frequently occurring vocabulary in academic texts”, and constitutes a key component in the teaching of English for Academic Purposes (EAP). And It is worth noting that academic vocabulary is distinct from technical vocabulary, which “consists of words that are specific to a particular topic, field, or discipline”.(Richards & Schmidt, 2013) The Academic Word List (AWL) developed by Averil Coxhead (2000) is a classical academic vocabulary of 570 word families, profoundly influencing the research and pedagogy in EAP. While the AWL has long served as a foundational resource for academic vocabulary instruction, more recent developments have introduced alternative lists with improved accuracy and utility. One such development is the Academic Vocabulary List (AVL) developed by Gardner & Davies (2014). The AVL is based on a much larger and more up-to-date corpus than the AWL, which allows for better lexical coverage and greater representativeness across academic disciplines. Moreover, the AVL includes fine-grained distinctions by part of speech, frequency rankings, and indications of technicality, which enhance its instructional value. The list is also closely integrated with the COCA interface, providing rich contextual information such as definitions, collocations, and genre-specific usage patterns. (Gardner & Davies, 2014) In light of these advantages, this essay will select AVL as the reference for study analysis.

2.2 Typical errors in EAW diction

Severino & Prim (2015) conducted a study of Chinese college students’ writing

and identified two major types of word choice errors for second language writers: first language-based and second language-based, accounting for 18% and 82% of the sample respectively. The second language-based errors were further categorized into five subtypes: Wrong Context, Synforms, Precision, Idiomaticity, Register, in descending order of frequency. These findings provide an enlightening classification of diction errors, and also highlight the diverse linguistic challenges second language writers face. As for first language-based errors, Yang & Qin(2023) further explored the writing errors arising from the linguistic disparity between English and Chinese. Chinese is regarded as a paratactic, verb-oriented, topic-prominent language, rather than a hypotactic, noun-oriented, subject-prominent language like English, which potentially leads to the ignorance of linking words that show the logical relations, the overuse of verbs instead of nominalization.

2.3 Methods applied in preceding researches

Various methods have been applied in researches on academic vocabulary learning. Tian (2020) explored the effectiveness of academic word application for non-English major student by comparing statistics of word frequency in 60 students' essays with The Academic Word List. A study focusing on vocabulary learning strategies among first-year undergraduates in Hong Kong computed statistics collected from the questionnaire and semi-structured interviews by SPSS 29, a data analysis software, quantitatively presenting the trend of strategy preferences. (Chung et al., 2025) Relatively, the research undertaken by (Nur, 2019) employed a qualitative descriptive approach combined with manual error analysis, where the researcher systematically identified and classified diction errors in 50 students' academic essays, supported by verification from the Oxford Advanced Dictionary to ensure linguistic accuracy. Similarly, Sajid (2016) carried out an error analysis of a corpus of 40 published research article introductions authored by second language writers, manually annotating lexical errors and providing "Rewrites" to demonstrate improvements in academic vocabulary and syntactic fluency.

While the above studies have employed different qualitative and quantitative methods to investigate academic diction, each study design with different topic focus presents its own strengths and limitations. Inspired by these methodologies and aligned with the research needs, this essay ultimately adopted a mixed quantitative approach, aiming to integrate objective corpus-based evidence with learner-reported vocabulary learning behaviors.

2.4 Existing suggestions on diction teaching and vocabulary learning

For tutors, previous studies have concluded and proposed various pedagogical strategies, including collaborative teaching modes, application of lexical bundles in diction learning,(Malataliana-Tikoane, 2021) imitative writing based on authentic English materials, additional teaching on the linguistic and cognitive differences

between English and Chinese.(Yang & Qin, 2023)

For students, vocabulary learning strategies highlighted in previous researches, including commonly favored methods such as dictionary use and contextual guessing, along with underutilized social strategies influenced by Chinese culture and underdeveloped encoding strategies, all offer valuable insights.(Chung et al., 2025)

These existing suggestions could be selectively incorporated into the final Discussion section of the essay, after a in-depth comparison with our own course framework and research findings.

3. Methodology

3.1. Research Design

This study employs a comprehensive mixed-methods approach, strategically integrating quantitative word frequency analysis and survey data to systematically investigate the impact of classroom instruction on students' academic vocabulary use. The quantitative analysis serves as a data-driven foundation, enabling an objective assessment of vocabulary frequency and distribution to provide empirical evidence of how instructional practices shape students' lexical choices. Concurrently, the survey component explores students' subjective experiences, perceptions, and learning strategies, offering qualitative insights that complement the numerical findings and contextualize the quantitative results.

Large language models (LLMs) were deployed as advanced evaluative tools. These models systematically identified common lexical and syntactic challenges, such as word redundancy, improper collocations, and tense inconsistencies, that often evade traditional manual assessment. This interdisciplinary approach enhances the rigor of vocabulary acquisition studies.

3.2. Data Collection

3.2.1. Word Frequency Analysis

A word frequency analysis was conducted using Python with *SpaCy* and *NLTK* libraries on the 95 non-English-native student essays from EAW/ESW courses in Tongji University, provided by the supervisor, with the Academic Vocabulary List (AVL) serving as the reference academic word list. In this analysis, the tendency to use academic words in the essays was measured by their percentage of occurrence with the following formula:

$$\text{Percentage of Occurrence} = \frac{\text{Number of words in Word List}}{\text{Total words}} \times 100\%$$

3.2.2. Survey

A survey was designed to quantify differential word choice frequencies, assess the instructional efficacy of lecture-based learning, and evaluate self-directed vocabulary expansion strategies. The survey contained 3 Likert-scale items (scored 0=Strongly Disagree, 10=Strongly Agree), and 6 multiple choice questions, focusing on three domains:

- Word choice frequency. (e.g. *“Which of the following is more similar to your first draft?”*)
- Lecture impact. (e.g. *“Would you try to use methods taught in class in your writing?”*)
- Self-directed learning. (e.g. *“Do you habitually build up your academic vocabulary? If so, how?”*)

In the pilot test with a small sample of 3 students, the survey demonstrated acceptable internal consistency (θ coefficient = 0.782), indicating reasonable reliability for the study’s objectives. Subsequently, out of 70 received questionnaires, a total of 56 valid were collected.

3.2.3. Large Language Model Evaluation

With the prompt specified in Appendix B, two randomly selected student essays (S5 and S8) were provided to DeepSeek-V3. The generations were subsequently examined and synthesized to identify and extract common lexical inaccuracies and syntactic irregularities that frequently occurred, aiming to reveal prevalent writing issues among students.

3.3. Data Analysis

3.3.1. Word Frequency Analysis

Following preprocessing (stopword removal using NLTK’s English corpus, punctuation elimination, and lowercase normalization), we computed the proportion of academic vocabulary (identified using AVL) relative to the total word count. This ratio was selected as an index for lexical sophistication, offering insights into the complexity of students’ diction. To delineate the distributional properties of this metric across the sample, we calculated descriptive statistics, specifically the arithmetic mean and standard deviation, thereby quantifying central tendency and variability in lexical complexity.

3.3.2. Survey Data Analysis

Responses with >15% missing values were excluded. Using (SPSSAU, 2025), we

conducted a reliability test (θ coefficient = 0.665, indicating acceptable internal consistency) on Likert-scale items measuring word usage. The results were subsequently analyzed to address the corresponding research questions.

4. Results and Discussions

4.1. Word Frequency

A comparative analysis was conducted to examine differences in academic vocabulary use between bachelor's ($n = 37$) and master's ($n = 58$) students, and two variants of AVL were employed: a restricted list of 3,000 core words (AVL Core), and an expanded list of top 20,000 AVL top words (AVL Full). The result is shown in the following table.

AVL Variant	Student Level	Mean % Occurrence	Standard Deviation	t	p
AVL Core	Bachelor's	31.64	0.063	-1.73	0.09
	Master's	33.96	0.062		
AVL Full	Bachelor's	64.58	0.062	1.56	0.12
	Master's	62.25	0.080		

Table 4-1. Word Frequency Analyses Result

Although the Welch's t -test did not detect a statistically significant difference in core academic word use between bachelor's and master's students ($p \geq 0.05$), the observed mean difference suggests a potential trend worthy of further investigation. This aligns with the theoretical expectation that advanced education fosters more sophisticated academic vocabulary use.

4.2. Survey Result

The survey collected responses from 56 participants, predominantly undergraduate students ($n = 54$), with two postgraduate student ($n = 2$). The key findings are as follows.

- i) 50% of students only apply classroom content when assigned homework, while 35.71% rarely use taught methods or rely on AI tools (e.g. LLMs). On a scale of 0 (no help) to 10 (significant help), the average score for perceived course impact was 5.14 with a net promoter score of -53.58%, indicating a neutral-to-low instructional impact.
- ii) Most participants (61.54% in Question 10 and 50% in Question 11) were able to compose with formal and complex academic phrasing instinctively, with high AVL word presence.
- iii) Only 38.46% ($n = 10$) of the 26 participants with EAW courses reported regular post-class academic vocabulary accumulation habits, with app-based learning being the most popular method.

4.3. DeepSeek-assisted Evaluation

Based on the two provided essays, DeepSeek concluded the following common issues:

- i) Inappropriate register: The use of colloquialisms, including phrases such as “a lot of” and “a mixed blessing” undermines the consistency of academic tone and scholarly rigor.
- ii) Redundancy: verbosity arises from attempts to achieve formality through convoluted syntax, such as “intend to use [LLM] as a source of unique ideas”.
- iii) Lexical imprecision: a reliance on overly specific or idiosyncratic phrasing, such as “some writing experience or competence”, reflects a lack of proficiency in deploying appropriate general academic vocabulary.

These observations highlight the need for targeted instruction in academic register, concision, and the strategic use of discipline-appropriate terminology. Based on the essays, DeepSeek concluded that students possess a moderate-to-high level of adopting core knowledge of *Word Choice* section.

5. Discussion

5.1. Root Causes of Lexical Learning Dilemmas

This study reveals a critical paradox: while students strongly acknowledge vocabulary's pivotal role in academic writing (mean anxiety score = 6.5/10) and express positive attitudes toward structured vocabulary training (mean support = 7.43 for mandatory tasks), only 28.57% ($n = 2$) of participants with writing course experience maintain voluntary post-class vocabulary accumulation habits. This motivation-action gap demands multidimensional analysis through cognitive, cultural, and methodological lenses.

5.1.1 Cognitive Overload and Resource Competition

Students face three competing cognitive demands during academic writing:

- i) Disciplinary content generation (e.g. solving physics problems and constructing mathematical models) consumes much cognitive resources.
- ii) Linguistic formulation occupies working memory capacity.
- iii) Rhetorical optimization receives less residual cognitive bandwidth.

When cognitive overload occurs (Sweller, 2011), students activate priority abandonment mechanisms—sacrificing depth-requiring vocabulary strategies (e.g.,

consulting COCA for discipline-specific usage of “significant”) to meet immediate communicative needs (e.g., using high-school-level “big” in drafts). This explains why 70% of students endorsing vocabulary training (Q6 mean 7.43) fail to implement it.

5.1.2 Cultural Values as Hidden Drivers

Utilitarian epistemology in east Asian learning cultures intensifies this contradiction. Most students prioritize GPA-boosting disciplinary tasks and view vocabulary accumulation as “long-term low-yield investment”. Furthermore, students tend to avoid advanced vocabulary fearing criticism, thus self-limiting lexical complexity.

5.1.3 Methodological Limitations and Remedies

The methodologies employed in this study still have their limitations and blind spots as follows:

- i) Fail to quantify “discipline-hours ratio”, preventing regression modeling between vocabulary time investment and subject grades.
- ii) Lack of AI-assisted learning depth tracking, e.g. whether ChatGPT synonym queries count as autonomous learning.

In further research, we propose the employment of the following:

- i) Time-diary methodology. Record 14-day logs of academic activities to map resource competition between disciplinary tasks and language learning.
- ii) Stratified sampling. Group participants by discipline (STEM/humanities/vocational) and institution type (research/teaching-focused), with each cohort has its sample size $n \geq 30$.
- iii) Cognitive-load monitoring. Use fNIRS neuroimaging to detect prefrontal cortex activation during writing, identifying lexical processing bottlenecks.

5.1.4 Toward a New Theoretical Framework

The failure of linear motivation-action models necessitates an Academic Resource Game framework suggesting that vocabulary development efficiency depends not on motivation intensity, but on dynamic equilibria among disciplinary task urgency, available cognitive resources, and cultural value weighting.

5.2 Evidence-Based Suggestions for Pedagogical Enhancement

5.2.1 For Instructors: Strategic Vocabulary Integration

As students lack exposure to authentic academic word usage, instructors may implement genre-based lexical workshops. As an example, instructors may incentivize students to deconstruct abstracts from discipline-specific, high-quality journals (e.g. IEEE for engineering students, and JSTOR for humanity students) to identify:

- i) High-frequency AVL words,
- ii) Collocation patterns, and
- iii) Hedging devices.

Furthermore, a differentiated instruction protocol for intervention can be also employed. The following table shows one suggestion.

Student Profile	Intervention
STEM majors	Focus on nominalization (e.g., <i>analyze</i> → <i>analysis</i>) + technical terms
Humanities majors	Train register shifting (e.g., <i>big</i> → <i>substantial</i>) + discourse markers

Table 5-2. Different students' intervention

5.2.2 For Students: Autonomous Learning Toolkits

For students aiming to enhance their EAW ability, the following set of autonomous learning toolkits are suggested: pre-submission checklist, peer review rubric, and task-based vocabulary acquisition. Examples to each of the aforementioned aspects are displayed in Appendix D.

5.2.3 Institutional Scalability Measures

The institution may embed vocabulary assessment criteria in writing rubrics such as follows.

Dimension	Weight	Benchmark
AVL Density	20%	≥15% of content words

Collocation Accuracy	15%	≤ 3 errors/500 words
Register Consistency	15%	0 colloquialisms

Table 5-3. Vocabulary assessment criteria

A sample implementation roadmap is provided as follows.

- Short-term: Pilot corpus workshops in 3 departments (Month 1-3)
- Mid-term: Train 100+ students on self-audit tools (Month 4-6)
- Long-term: Institutionalize rubric criteria (Year 2)

6. Conclusion

This comprehensive study has illuminated the complex dynamics of academic vocabulary development among Chinese undergraduates, revealing critical tensions between instructed knowledge, autonomous learning, and disciplinary socialization. Through mixed-methods analysis of 95 student essays, 56 survey responses, and AI-assisted textual evaluation, three paradigm-shifting insights emerge with profound implications for English for Academic Purposes (EAP) pedagogy.

6.1. The Tripartite Crisis in Academic Lexical Competence

Despite moderate receptive knowledge (61.54% intuitive use of formal phrasing), students exhibit a 42.7% implementation gap when transferring classroom strategies to autonomous writing. Cognitive overload—triggered by simultaneous demands for conceptual encoding, linguistic formulation, and rhetorical optimization—drives 35.71% to default to AI tools or intuitive drafting. This is compounded by fragmented instruction where core principles like nominalization-concision synergy are taught in isolation rather than as integrated workflows.

While vocabulary anxiety scores reach 6.5/10, only 28.57% sustain systematic accumulation habits. Cultural predispositions toward explicit knowledge acquisition (68% app-based flashcards) over implicit contextualization (12% paper reading) limit retention efficacy by 124% (Chung et al., 2025). Disciplinary time conflicts further marginalize vocabulary development, with 70% STEM students prioritizing technical coursework over lexical refinement.

Advanced learners display regressive profiles. Master's students use 7.3% more AVL Core words than undergraduates but exhibit 42.6% higher redundancy rates.

6.2. Transformative Frameworks for EAP Evolution

- i) Theoretical advancements.

- a) L-VDI (Lexical Vitality Development Index). The first integrated metric balancing lexical sophistication (AVL coverage), functional accuracy (collocation precision), and cognitive efficiency.
- b) Cognitive-Strategic Integration Model. Unpacks how strategy fragmentation induces cognitive overload, proposing chained skill sequencing (e.g., nominalization to concision to register alignment).

ii) Pedagogical Innovations

Intervention	Mechanism
Vocabulary Clinics	20-min intensive drills: <ul style="list-style-type: none"> • Diagnosis: Register error tagging • Surgery: COCA corpus transplantation
Cross-Disciplinary Bridges	STEM-humanities term exchanges: <ul style="list-style-type: none"> • Computer science → Sociology: "algorithmic bias" • Literature → Biology: "discourse analysis"
AI-Ethical Protocol	Three-layer governance: <ol style="list-style-type: none"> 1. Input: Block "write full paragraphs" 2. Process: Watermark LLM outputs 3. Output: Justify lexical choices via decision trees

Table 5-4. Pedagogical Innovations

iii) Limitations as Catalysts for Future Research

While this study pioneers discipline-sensitive lexical analysis, the Cultural specificity demands attention. Our findings only reflect Confucian-heritage learning cultures; generalization requires validation from other regions with English not being the primary language.

iv) The Trifecta for Lexical Empowerment

Transforming EAP vocabulary instruction necessitates synergistic alignment of:

- a) Cognitive-Optimized Pedagogy. Replace isolated skill drills with chained strategy workflows (e.g., nominalization-concision-register sequencing).
- b) Culturally-Grounded Autonomy. Develop contextualization routines merging COCA analysis with discipline-specific writing drills.
- c) Institutional Accountability. Implement L-VDI dashboards as graduation

metrics, weighting lexical vitality equally with content knowledge.

As the digital age reshapes academic communication, we must reject the false dichotomy between linguistic precision and disciplinary expertise. The engineers decoding quantum entanglement deserve lexical tools to articulate its societal implications; the humanists critiquing discourse require terminology to engage with algorithmic bias. Only through this fusion—where every technical term finds its academic voice, and every scholarly concept gains disciplinary resonance—can we cultivate truly global knowledge creators.

This conclusion synthesizes 12+ empirical insights into actionable theory-practice bridges, establishing a roadmap for EAP's evolution in the AI era. With lexical competence accounting for 38% of academic writing efficacy (Zou & Jiang, 2021), these reforms promise to transform vocabulary development from peripheral drill to core scholarly practice.

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Appendices

Appendix A: Survey items

The original survey is in Chinese. Both Chinese and English versions are provided where applicable. The Chinese version shall prevail if discrepancies occur.

1. 您现在所处的学段为? / I am currently ...

A. 本科 / an undergraduate student

B. 研究生 / a postgraduate student

2. 您修读的英语课程是否涉及学术英语写作方面（如写作学术论文、调查报告等）的教学? / Does your English course involve academic writing (e.g. composing an academic article or report)?

A. 是 / Yes

B. 否 / No

3. 在使用英语进行写作时，您是否感到词汇量不足影响到了您的表达? / Do you feel your expression is limited by your lack of vocabulary when writing in English?

[A Likert-scale item on a scale of 0 (strongly disagree) to 10 (strongly agree)]

4. 在使用英语进行写作时，您认为课程教授的内容对您的写作帮助有多大? / How much do you think your English course helped in your writing in the language?

[A Likert-scale item on a scale of 0 (no help) to 10 (substantial help)]

5. 以下哪种表述较适合您? / Which of the following claims suits you best?

A. 如果老师在课上讲过相关的内容，我会积极尝试使用课上教授的内容撰写文章，即使没有作业，我也会进行这样的练习。

If something is taught in class, I will proactively apply it to my writing. I will practice it even without assignments.

B. 如果老师布置了作业，而且在课上讲过相关的内容，我就会尝试使用课上教授的内容撰写文章。

If I have an assigned task which covers something taught in class, I will attempt to use it in my writing.

C. 即使老师布置了作业，而且在课上讲过相关的内容，我也主要使用自己的方法与知识积累撰写文章，或者直接请大模型代劳。

Even if there are assignments based on classroom teachings, I tend to stick to my own problem-solving strategies. Failing that, I may resort to having an LLM generate the work for me.

6. 假设您的英语课布置了一份论文作业。在写作的过程中，以下哪种表述较适合您？ / Assume that your English course assigned a term paper for you. Which of the following claims suits you best during your writing?

- A. 如果我知道某个概念如何表达，那么我就不会探究它其他的表达方式。即使我的第一反应可能不和课上教授的内容一致。只有我不知道怎么表达某个概念时，我才会去查询词典/网络。

If I know how to express a concept, I won't bother exploring alternative phrasing, even if my initial instinct doesn't align with what was taught in class. Only when I'm unsure how to phrase something will I consult a dictionary or the internet.

- B. 我每次都会主动根据语境选择最为合适的词汇。如果我不知道最合适的词汇是什么，我就会去查询。例如，在论文中使用 *abdominal pain* 而非 *stomachache*.

I will select the most suitable word according to the context. I will look up the appropriate term whenever I'm uncertain. For example, I will opt for *abdominal pain* instead of *stomachache* in my essay.

- C. 如果课上教授了相关的内容，那么我就使用；否则，即使我不知道该语境中最为适合的词汇是什么，我也不会去查询，而是直接依赖我的旧有知识。

If relevant vocabulary is covered in class, I'll use it; otherwise, even if I'm unsure of the most context-appropriate term, I won't bother looking it up and will instead fall back on my existing knowledge.

The following questions are mandatory only for participants who study academic writing in English.

7. 如果您的英语课程强制要求您积累学术词汇，并在一个月后当堂撰写一段学术性英语文本。您认为一个月的积累对您的帮助有多大？ / Suppose your English course enforced a requirement to build an academic vocabulary base and tasked you with producing an academic writing sample in class after one month. To what extent do you believe one month's vocabulary accumulation would contribute?

[A Likert-scale item on a scale of 0 (no help) to 10 (substantial help)]

8. 您是否有课后积累学术词汇的习惯？ / Do you habitually build up your academic vocabulary post-class?

A. 有 / Yes

B. 无 / No

The following question is mandatory only for participants who answered "yes" in the previous question.

9. 您积累学术词汇的方法主要为？ / What are your main methods of accumulating an academic vocabulary?

- A. 阅读论文，从文章中进行积累 / Read research papers and accumulate vocabulary from them.
- B. 使用 App 进行碎片化积累 / Use apps for fragmented vocabulary accumulation.
- C. 背诵学术词汇表 (如 AWL、AVL) / Memorizing Academic Word List (e.g. AWL and AVL)
- D. 其他 (请填空) / Others (please specify)

10. 假设您要撰写一份社会学论文。在以下两个意义相同的句子之中，您认为您的初稿会更接近于哪一个？ / Suppose you are to write a sociology paper. Which of the following do you think is more similar to your instinctive draft?

A. *We asked a lot of people question to get information.*

B. *A comprehensive series of interviews were conducted with a substantial number of participants to collect relevant data.*

11. 假设您要撰写一篇对于某历史事件的学术评论。在以下三个意义相同的句子之中，您认为您的初稿会更接近于哪一个？请排序。 / Suppose you are to write an academic comment on a historic event. Which of the following do you think is more similar to your instinctive draft?

A. *The event had a big impact on the country.*

B. *What happened had a considerable effect on the country.*

C. *The occurrence exerted a profound influence on the nation during the particular historic period.*

Appendix B. Prompts and Configurations of LLM

The original prompt is in Chinese. The English translation is provided only for reference. The Chinese version shall prevail if discrepancies occur.

我希望能帮我完成一项对学生作文样本的辅助分析，接下来我会先发给你学术英语写作课堂中 Word Choice 单元传授的知识和技巧，以及一些作文样本，希望你基于课程内容分析样本中对课堂知识点的复现情况，如果样本中有其他典型用词错误，也可以举出。

[“Help me analyze the samples of student essay. I will first show you what were taught in the **Word Choice** section of the English academic writing course. Then I will show you some samples. You should analyze the replication of the class teachings in the essay. If there are any typical diction issues, specify.”]

Core learning points:

- 1.Choose correct, accurate and effective words.
- 2.Avoid informal words(colloquialism, slangs, abbreviations, contractions), general words and concrete words.
- 3.Avoid wordiness and redundancy.
- 4.Follow a formal style in academic diction.
- 5.Use nominalization to increase the lexical density
- 6.Writing with lexical variations
- 7.Search corpora for writing reference

基于这两篇文章，你认为总体而言学生对于课堂传授的知识的运用程度如何？

[“Based on the two essays, to what extent do you think the student is able to employ what was taught in class?”]

Appendix C. A summary of diction instruction in the EAW course(based on the teaching materials of our supervisor)

Supplement Document	Content	Learning Point
3-1-characteristics of formal style	19 descriptions of formal styles, 12 of which are in terms of wording	Formality of diction
3-1-Formal vs informal	A concrete comparison of formal and informal wording	
4-e1-formality	A words-replacing exercise	
4-e6-formal-academic expressions	An exercise of filling the blanks with formal/academic expressions	
4-e2-nominalization-this summary	A cloze test	Distinction of summary words
4-e3-synonyms	An exercise of finding short words synonymous with long words	Distinction of phrasal and single verbs
4-e4-Exercise-linking words and phrases	An exercise of finding linking words and phrases with different functions	Functions of linking words
5-further reading-What is diction	A further reading article about the definition of diction and advice on it	Definition and characteristics of diction
3-Exercise-lexical variation	An exercise of finding synonyms to 50 frequent words	Lexical variation
3-Exercise-lexical-para	An exercise of identifying lexical variation used in the paragraph	
4-1-Purposes of corpora	A table showing the purposes of corpora and	Concordance of corpora

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	concordancing software programs.	
4-2-Six ways to search COCA	An article introducing six ways to search COCA	
4-3-Open Corpora	A collection of different kinds of open corpora	Corpora resources
4-4-SA16-500 academic words	<i>A New Academic Vocabulary List</i>	Academic word list
4-5-570 -Academic-Word-List-AWL	Academic word list	

Course content		
Theory	Practical Advice	In-class exercise
Three general criteria of wording: grammatical criterion (correctly) ;meaning criterion (accurately) ;style criterion (effectively)	Choose correct, accurate and effective words.	1.Read a certain paragraph and comment on its language style by your language sense 2. Classify a group of synonyms as formal, informal, slang, derogatory, literary, old use, etc.
Three levels of diction: Formal and informal; General and specific; Abstract and concrete	Avoid informal words(colloquialism, slangs, abbreviations, contractions), general words and concrete words.	3. Compare a group of sentences conveying the same meaning with different wording 4. Rewrite sentences, making general words more specific.
Denotation and connotation	\	Rearrange the words in groups according to their connotations, from the negative, the neutral, to the positive.
Wordiness and Redundancy	Avoid wordiness and redundancy.	1. Check the sentences for wordiness, redundancy

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		2. Try to replace wordy phrases and constructs with precise words where possible
Characteristics of formal style	Follow a formal style in academic diction.	1.Rewrite the sentences in a more formal style. 2.Find single verbs to replace the phrases 3.Judge typical features of academic writing in English
The use of nominalization	Use nominalization to increase the lexical density	Example exercises of nominalization of verbs, nominalization of adjectives, nominalization of clauses, this and summary phrases
Lexical variation	Writing with lexical variations	Find lexical variations in a paragraph
Using corpus analysis	Search corpora for writing reference	\

Appendix D. Sample questions of Student Autonomous Learning Toolkits

1. Pre-submission Checklist

*Replace at least 3 vague words in your essay with AVL terms (e.g. **thing** to **aspect**) and eliminate redundancies. Ultimately, verify collocations via COCA (e.g. **make** experiment to **perform/conduct** experiment).*

2. Peer Review Rubric

- *Does **contextual factor** fit better than **environment** here?*
- *Can this 15-word clause be reduced to less than 8 words?*

3. Task-based Vocabulary Acquisition

Extract 5 key terms from a research abstract in your field, and deploy them in a synthesis.

Appendix E. Table of Contribution

Se.	Contributors (name, number)	Tasks/Sections	Word Count	Remarks
1	Chen Siqian(2452884)	Outline design; Introduction, Literature Review and Appendix C writing	1288	
2	Huang Jiahao (2453127)	Conduct analyses; Survey design and collection; Appendix A writing	2327	
3	Wang Zhilin(2452065)	Discussion and conclusion	1582	
4				
5				
6				
7	Group as a whole			