



Public Administration Students' Perceptions of Corpus-Driven Instructional Design in EFL

Misnawati Misnawati^{1*}, Saidna Zulfiqar Bin Tahir², Yusriadi Yusriadi¹, Abdul Rahman¹, Nur Ainun Musa¹

¹Universitas Cahaya Prima, Indonesia

²Universitas Iqra Buru, Indonesia

*Corresponding Author: amirmisnawati@gmail.com

ARTICLE INFO	ABSTRACT
<p>Received: 2026-03-25 Revised: 2026-05-27 Accepted: 2026-06-15</p> <p>Keywords: Corpus Linguistics; Data-Driven Learning; English as a Foreign Language (EFL); Public Administration; Vocabulary Acquisition</p>	<p>This study investigates the implementation of a corpus-driven instructional design in an English for Specific Purposes (ESP) course for Public Administration students. The model, grounded in constructivist learning principles and corpus-based data-driven learning, aims to enhance vocabulary acquisition by engaging students with authentic language data and corpus analysis tools, such as keyword-in-context (KWIC) analysis and collocation exercises. The study employed a qualitative research design, collecting data through semi-structured interviews with 36 second-year students. The findings revealed that students initially faced challenges adapting to corpus tools and data-driven learning but developed positive perceptions after receiving targeted instruction and support. Students reported increased confidence and motivation in their vocabulary learning after engaging with the model. Tailored learning plans, active learning activities, and continuous feedback were perceived as beneficial for vocabulary development. Overall, the instructional design was positively received by students, who appreciated its emphasis on authentic language use, learner autonomy, and personalized instruction. This study contributes to the growing body of research on corpus-based pedagogy in ESP. It offers practical guidance for language educators seeking to enhance vocabulary instruction in specialized fields through the integration of corpus analysis and data-driven learning.</p>

Citation (APA): Misnawati, M., Tahir, S. Z. B., Yusriadi, Y., Rahman, A., & Musa, N. A. (2026). Public Administration Students' Perceptions of Corpus-Driven Instructional Design in EFL. *Innovations in Language Education and Literature*, 3(1), 43-58.

INTRODUCTION

Vocabulary acquisition is crucial in English as a Foreign Language (EFL) education (Nation, 2021; Schmitt, 2010), especially for Public Administration students (Misnawati, Atmowardoyo, et al., 2024). In this field, strong vocabulary is not just helpful. It's essential for effective communication and academic success (Hyland & Tse, 2007). Public Administration students must navigate complex texts, engage in substantive discussions, and articulate ideas clearly and precisely (Kinsella & Waite, 2021; Nurlybaeva, 2022). Professionally, a robust vocabulary is needed for tasks like drafting policy documents, communicating with diverse stakeholders, and understanding scholarly literature (Kareva, 2013; Santoso et al., 2023). However, students often struggle to understand English texts, particularly those with specialized terminology (Misnawati, Anwar, et al., 2024), such as policy reports and governmental regulations. For example, understanding terms like "fiscal policy" or "regulatory compliance" can be a significant hurdle.

Traditional vocabulary instruction, often relying on rote memorization and decontextualized learning (Abdushukurova, 2024; Flanigan & Greenwood, 2007; Gnyawali, 2010), has limitations. Corpus Linguistics (CL) offers a viable alternative. By exposing students to authentic language data, CL allows them to explore word usage patterns, collocations, and contextual meanings (Misnawati, 2024a; Misnawati, Atmowardoyo, et al., 2025; Misnawati, Yusriadi, et al., 2025). This approach helps students identify common collocations and understand complex semantic relationships (Barth & Schnell, 2021; Egbert et al., 2020; Meyer, 2023). Aligned with Data-Driven Learning (DDL), this method promotes a deep understanding of vocabulary, moving beyond simple definitions and encouraging active linguistic exploration (Crosthwaite et al., 2021, 2023). Students can



independently interpret linguistic patterns (Boulton, 2017; Flowerdew, 2015). DDL makes vocabulary acquisition more interactive, relevant, and meaningful (Men, 2020; Meunier, 2020). In English for Specific Purposes (ESP) contexts, corpus-driven learning allows students to engage with vocabulary in authentic, meaningful contexts, enhancing their comprehension of professional and academic discourse.

This study aims to investigate Public Administration students' perceptions of a corpus-driven instructional model in their ESP course, focusing on its effectiveness in vocabulary acquisition. The model includes corpus-based activities like keyword-in-context (KWIC) analysis, collocation exercises, and concordance line exploration. These activities enable students to analyze real-world texts related to their field and develop a deeper understanding of professional vocabulary.

The importance of this research stems from the increasing need for Public Administration students to master specialized terminology for academic and professional success. A lack of vocabulary mastery can hinder their ability to understand public policy, impacting their ability to contribute effectively. Traditional rote-learning methods often fail to provide sufficient contextual understanding. This study seeks to bridge this gap by examining how corpus-driven learning enhances vocabulary acquisition and student engagement while also identifying potential challenges. Therefore, this study asks: 1) How is a corpus-driven instructional model designed to facilitate vocabulary acquisition in an ESP course? and 2) What are Public Administration students' perceptions of using a corpus-driven instructional model in their ESP learning? While research on CL and DDL is extensive, studies specific to Public Administration are limited. The novelty of this study lies in its application of corpus-based pedagogy to Public Administration ESP, a field that needs more scholarly attention. The findings will help enhance language pedagogy by integrating corpus analysis into ESP curricula, ensuring students are better prepared to understand policy documents, communicate effectively, and apply language skills in professional settings.

LITERATURE REVIEW

Vocabulary Acquisition in EFL and its Significance in Public Administration

Vocabulary acquisition is a fundamental aspect of language learning, particularly in English as a Foreign Language (EFL) contexts (Nation, 2001, 2021). A strong vocabulary enables learners to comprehend and use language effectively (Farida et al., 2020), a crucial skill for both professional and academic environments (Al Zahrani & Chaudhary, 2022; Syaifudin et al., 2020). This is especially true for Public Administration students, who must navigate complex policy documents, legal frameworks, and governance structures while also participating in academic discourse and professional communication (Misnawati, 2024a; Misnawati, Anwar, et al., 2024; Misnawati, Atmowardoyo, et al., 2025). Their ability to analyze and articulate ideas depends heavily on their mastery of technical and discipline-specific terminology (Awaah, Okebukola, Alfa, et al., 2021; Awaah, Okebukola, Ebinis, et al., 2021; Morse & Stephens, 2012).

Challenges in Vocabulary Acquisition and Limitations of Traditional Approaches

Despite its importance, students often struggle to retain and apply new vocabulary meaningfully (Afzal, 2019; Rosyada-AS & Apoko, 2023). These challenges include integrating new words into existing knowledge, limited exposure to authentic contexts, and insufficient opportunities to practice vocabulary within professional discourse (Schmitt, 1997, 2010). These issues are particularly pronounced in specialized fields like Public Administration, where terminology such as "fiscal accountability," "administrative discretion," or "public sector reform" can be highly technical and abstract (Watson & Lynch, 1998). Research has shown a strong link between vocabulary knowledge and reading comprehension, writing proficiency, and overall academic performance (Karakoç & Köse, 2017; Qian & Lin, 2019). Therefore, effective vocabulary instruction is essential for student success.

Traditional vocabulary instruction often relies on rote memorization and word lists (Halici Page & Mede, 2018; Kilickaya & Krajka, 2010). While these methods may help with initial recognition, they often fail to promote long-term retention and meaningful usage (Santillan & Daenos, 2020). Students may memorize definitions without understanding the nuances of word meanings, collocations, or contextual applications (Laufer, 2017; Wright & Cervetti, 2017). For example, knowing the definition of "policy implementation" does not guarantee students can discuss its complexities in a real-world scenario.

Furthermore, decontextualized learning leads to low retention and limited knowledge transfer (Rowe, 2013; Sinatra et al., 2012; Ünalı et al., 2013). Many traditional approaches favor teacher-centered instruction, reducing opportunities for active engagement with vocabulary in real-world applications (McKeown, 2019). This can diminish motivation and engagement, hindering the development of professional language skills.

The Promise of Corpus Linguistics and Data-Driven Learning

Corpus Linguistics (CL) offers a compelling alternative. It allows students to analyze authentic language data (Misnawati, Nur, et al., 2024), observe word usage in context, and develop a deeper understanding of word frequency, collocations, and semantic relationships (Boru, 2012; Yunus, 2022). By exposing students to real-world language, corpus-driven learning bridges the gap between academic knowledge and practical application (Ali Al-Qahtani, 2021; Egbert et al., 2020).

Data-Driven Learning (DDL) leverages CL. DDL encourages students to become active inquirers into language (Boulton & Tyne, 2015; Lin, 2019; Lin & Lee, 2015), exploring linguistic patterns and deducing rules from authentic corpus data rather than passively absorbing definitions (Boulton, 2010; Crosthwaite, 2019). Students engage in activities like keyword-in-context (KWIC) analysis, observing how words function in diverse texts; collocation analysis, identifying common word pairings such as "policy implementation," "regulatory framework," or "public expenditure;" and concordance line exploration, understanding sentence structures and the pragmatic use of vocabulary in professional contexts. Integrating these techniques fosters language learning autonomy and enhances engagement, making learning more interactive and personalized (Huang, 2011; Yunus, 2022). Research has shown the effectiveness of corpus-based learning in promoting critical thinking and improving vocabulary retention (Boulton & Tyne, 2015; Crawford & Csomay, 2016).

Addressing the Research Gap in ESP

Numerous studies have highlighted the effectiveness of corpus-based instruction in enhancing vocabulary acquisition in various EFL contexts. For example, research by Cheng (2013), Jamal et al., (2021), and Lewandowska (2014) showed that corpus-driven learning facilitates accurate use of linguistic features and fosters learner autonomy. Similarly, Boulton and Pérez-Paredes (2014), Breyer (2009), Frankenberg-Garcia (2014), and Gavioli (2005) demonstrated the potential of corpora to cultivate language awareness and analytical skills.

Despite this evidence, there is a gap in research on CL and DDL, specifically in Public Administration ESP courses. Most studies focus on general EFL or academic English, not specialized professional domains. The complexity of Public Administration discourse, including legal, bureaucratic, and governance-related language, requires tailored corpus-based learning approaches. This study aims to address this gap by investigating how a corpus-driven instructional model can be implemented for Public Administration students and examining their perceptions of its impact on vocabulary acquisition.

Navigating the Challenges of Corpus-Based Instruction

While corpus-based instruction offers advantages, implementation faces challenges. Some students may need scaffolding and instructor guidance to interpret linguistic data within-corpus analysis tools (Chang & Sun, 2009; Corino & Onesti, 2019; Nesselhauf, 2003). Access to corpus resources and technology can also be a barrier (Reber, 2019; Schaeffer-Lacroix, 2019). Addressing these challenges requires research into practical strategies for integrating corpus-driven learning into ESP curricula, particularly in specialized fields like Public Administration.

This study contributes to developing innovative instructional designs by examining how CL and DDL can be adapted to meet the needs of Public Administration students. It aims to provide a framework for implementing corpus-based learning in ESP education and enhance pedagogical tools for vocabulary instruction in specialized domains.

METHODS

Research Design and Framework

This study employs a qualitative research design to investigate the implementation and effectiveness of a corpus-driven instructional model in an ESP course for Public Administration students. This innovative pedagogical approach allows for an in-depth understanding of student experiences, perceptions, and learning outcomes. The research consists of two phases:

1. Phase 1: Model Development: A literature-based conceptual framework was developed through an extensive review of literature on Corpus Linguistics (CL), Data-Driven Learning (DDL), and ESP instruction in Public Administration. This framework synthesized previous research on vocabulary acquisition, corpus-based learning, and language instruction for specialized fields. The resulting corpus-driven instructional model incorporates activities such as keyword-in-context (KWIC)

analysis, collocation exercises, and concordance line exploration, all tailored to the specific language needs and challenges of Public Administration discourse.

- a. Key Principles: The model emphasizes active learning, authentic language use, and learner autonomy. It encourages students to explore language data independently and draw their own conclusions about vocabulary usage.
- b. Example Activity: In a collocation exercise, students might use a corpus like the Corpus of Contemporary American English (COCA) to investigate the frequent collocates of "policy" (e.g., "policy implementation," "policy analysis," "foreign policy"). They would then analyze how these collocations are used in different contexts within public administration texts.

Before proceeding to Phase 2, the initial CoD-ID framework underwent an expert validation process. Two experienced ESP practitioners reviewed the conceptual model to ensure its pedagogical coherence and contextual relevance for Public Administration students.

2. Phase 2: Classroom Implementation and Exploration: The instructional model was implemented in an actual ESP classroom to explore students' perceptions and experiences. This phase adopted an exploratory case study approach, allowing for an in-depth examination of how students interacted with and perceived corpus-driven learning in their specialized field.

Setting and Participants

The study was conducted in an undergraduate Public Administration ESP course at Universitas Cahaya Prima, Indonesia. Participants were 36 second-year students (average age: 20; 60% female, 40% male) enrolled in an English for Public Administration course designed to develop language skills relevant to governance, policymaking, and bureaucratic communication. Purposive sampling was used to ensure that participants had basic English proficiency and were actively engaged in Public Administration studies. The course curriculum focused on preparing students for real-world applications of English, such as analyzing policy documents, drafting reports, and participating in discussions on governance-related topics. Prior to data collection, all participants were informed about the research objectives and provided written consent to participate in the study.

Data Collection Methods

Semi-structured interviews were employed to gain a rich understanding of student perceptions and experiences. Twelve students were selected for in-depth interviews, chosen to represent a range of perspectives and experiences within the class. This sample size was deemed appropriate to capture a diversity of viewpoints while maintaining the feasibility of conducting in-depth qualitative interviews.

The interview protocol focused on exploring students' perceptions of the corpus-driven instructional model, including its benefits, challenges, and impact on their learning. Specific questions addressed: 1) Students' overall impressions of the corpus-driven activities, 2) How the activities helped them understand vocabulary in context, 3) Whether the activities improved their confidence in using vocabulary, 4) Any challenges they faced with using corpus tools or interpreting data, and 5) Suggestions for improving the instructional model. In addition, interviews were conducted in a mix of English and Bahasa Indonesia to facilitate comfortable and nuanced expression of thoughts.

Data Analysis

The qualitative data were analyzed using thematic analysis (Braun & Clarke, 2006, 2019). This involved a systematic process of 1) *Data Familiarization*: Immersion in the data through repeated reading and listening to recordings; 2) *Code Generation*: Developing initial codes to capture recurring patterns and ideas in the data; 3) *Theme Development*: Grouping codes into broader themes that represent significant aspects of the data; 4) *Theme Review and Refinement*: Revisiting and refining themes to ensure they accurately reflect the data and address the research questions; 5) *Theme Definition and Naming*: Clearly defining and naming the final themes to capture their essence; and 6) *Report Writing*: Presenting the findings in a clear and compelling narrative, supported by illustrative quotes and examples from the data.

To ensure analytical rigor and reliability, an inter-coder reliability check was conducted. A second coder (one of the co-authors) independently coded a subset of the interview transcripts, and any discrepancies were resolved through discussion to reach a consensus. After that, member checking was employed, where participants reviewed the identified themes and interpretations for accuracy. This process helped to validate the findings and minimize researcher bias.

For the presentation of findings, excerpts from interviews that were originally conducted in Bahasa Indonesia were translated into English by the researchers. Minor editing was applied to the translated quotes to ensure readability and academic flow, while strictly preserving the participants' original tone and intended meaning.

Corpus Used

The study utilized the English Corpus of Public Administration (ECOPA), <https://www.ycit.or.id/ecopa/>, accessed through the online interface (Misnawati, 2024a, 2024b; Misnawati, Atmowardoyo, et al., 2025). ECOPA was selected due to its content and context and its inclusion of a variety of text types relevant to public administration (e.g., academic journals, government documents, and news reports). Students were provided with training on how to use the ECOPA interface to search for words, analyze collocations, and explore concordance lines.

FINDINGS

Corpus-Driven Instructional Design for Vocabulary Acquisition in ESP

Development of the Corpus-Driven Instructional Design

The Corpus-Driven Instructional Design (CoD-ID) was developed to enhance vocabulary acquisition in ESP courses. The model integrates Corpus Linguistics (CL) and Data-Driven Learning (DDL) within a constructivist learning framework, encouraging students to explore authentic language use rather than rely on rote memorization. The development of the model focused on three key aspects: (1) theoretical foundations, (2) corpus-based learning integration, and (3) adaptation to ESP contexts.

1. **Theoretical Foundations:** The CoD-ID model is based on constructivist learning principles, which emphasize active student engagement in language discovery (Behrens, 2021; Tarnopolsky, 2012). Unlike traditional methods, this approach enables students to construct their understanding of vocabulary through exploration, research, and contextual analysis. Additionally, the model draws from Task-Based Language Teaching (TBLT) and Project-Based Learning (PjBL), incorporating real-world tasks and collaborative projects (Moore, 2018; Nurhidayah et al., 2021; Pilu et al., 2022). However, the key distinction of CoD-ID is the direct application of corpus tools, allowing students to analyze and discover language patterns actively.
2. **Corpus-Based Learning Integration:** The core feature of the model is its use of corpus analysis as the primary method for vocabulary acquisition. Rather than memorizing definitions, students engage with keyword-in-context (KWIC) analysis, collocation studies, and concordance exploration to understand how words function in policy texts, government reports, and bureaucratic discourse. For example, students might use the ECOPA corpus to analyze the collocations of "*regulation*" and compare its usage with related terms like "*legislation*" or "*policy*." They might also explore concordance lines to see how the word "governance" is used in different sentence structures and contexts. This approach ensures that students learn vocabulary in real-world contexts, improving retention and application.
3. **Adaptation to ESP Contexts:** To make the model relevant to ESP students, specialized corpora were selected. For instance, Public Administration students focus on policy documents, legal texts, and administrative discourse. Practical applications require students to analyze vocabulary in authentic Public Administration contexts. They conduct task-based corpus research projects related to governance and policymaking and develop presentations and reports based on corpus findings, strengthening both linguistic and analytical skills. These adaptations ensure that students gain functional vocabulary knowledge applicable to both academic and professional settings.

Principles of the Corpus-Driven Instructional Design

The Cod-ID model is grounded in the following key principles:

1. **Student-centered learning:** This principle emphasizes the active role of students in their learning process. The Cod-ID model fosters a sense of agency and encourages deeper engagement with the subject matter by empowering students to take ownership of their vocabulary acquisition through corpus-based exploration and discovery. For example, students might be free to choose specific policy areas or vocabulary sets to investigate based on their interests and learning goals.
2. **Autonomous learning:** The data-driven approach encourages learners to become independent, self-directed language researchers. Students develop critical thinking, problem-solving, and information

literacy skills essential for lifelong learning by engaging in corpus analysis and research tasks. This autonomy fosters a sense of responsibility and prepares students for the demands of academic and professional environments, where they must independently acquire new knowledge and skills.

3. Inductive learning: Through inductive learning, students analyze corpus data to observe language patterns and draw their own conclusions about vocabulary usage. This process promotes critical thinking, analytical skills, and a deeper understanding of language structure and meaning. For example, students might analyze concordance lines to identify the typical grammatical structures and collocations associated with specific vocabulary items.
4. Digital learning: The Cod-ID model leverages digital corpus tools and resources to facilitate interactive, technology-enhanced vocabulary instruction. This allows learners to engage with authentic language data innovatively, fostering digital literacy and preparing them for the increasingly digital landscape of public administration. For instance, students might use online concordancers, vocabulary profiling tools, and data visualization software to explore and analyze corpus data.
5. Learning authenticity: By grounding vocabulary learning in real-world public administration contexts, the model ensures the relevance and applicability of the acquired knowledge. This authenticity motivates students, enhances their understanding of how language is used in their field, and better prepares them for their future academic and professional endeavors. For example, students might analyze authentic policy documents, government reports, or speeches by public officials to learn vocabulary in its natural context.

Overview and Stages of the Corpus-Driven Instructional Design

The Cod-ID model consists of seven key stages, each designed to facilitate vocabulary acquisition in a specific way:

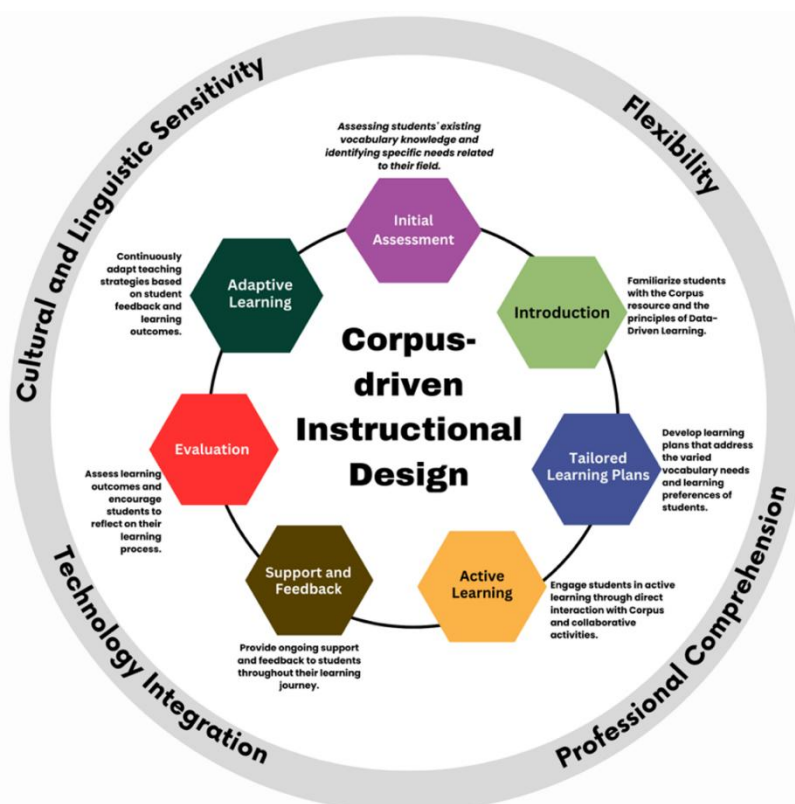


Figure 1. Corpus-Driven Instructional Design

The Cod-ID model consists of seven key stages, each designed to facilitate vocabulary acquisition in a specific way:

1. Initial Assessment and Needs Analysis: This stage involves assessing students' existing vocabulary knowledge and identifying their specific needs related to their field. Various tools, such as surveys, interviews, and diagnostic tests, are used to gather comprehensive information about students' language proficiency, familiarity with specialized terminology, and learning preferences. This information is then used to tailor the learning experience to individual needs.

2. **Introduction to Corpus and Data-Driven Learning (DDL):** This stage aims to familiarize students with corpus resources and the principles of DDL. Educators provide comprehensive orientation sessions, visual aids, and interactive exercises to help students understand how to navigate and utilize corpus data effectively for vocabulary learning.
3. **Tailored Learning Plans:** Individualized learning plans are developed based on the initial assessment, addressing the specific vocabulary needs and learning preferences of each student. These plans incorporate personalized projects, group projects, and corpus analysis tasks to provide students with practical experience in using corpus tools for language learning.
4. **Active Learning and Engagement:** This stage emphasizes active involvement in the learning process through direct interaction with corpus tools and participation in collaborative activities. Students engage in research and analysis tasks, present their findings, participate in peer discussions and debates, and collaborate on group projects.
5. **Continuous Support and Feedback:** Ongoing support and feedback are provided throughout the learning journey to maintain student engagement, ensure comprehension, and facilitate the application of acquired skills. Regular feedback sessions, one-on-one consultations, and self-reflection activities are incorporated to foster a culture of continuous improvement.
6. **Evaluation and Reflection:** Learning outcomes related to vocabulary acquisition and application are assessed through formative and summative assessments, including quizzes, assignments, and reflective essays. Feedback and review sessions are conducted to discuss students' reflections and assessments, allowing them to receive additional feedback and discuss their achievements and areas for growth.
7. **Adaptive Learning Strategies:** The instructional approach remains flexible and responsive to feedback and learning outcomes. Assessment results and student feedback are regularly reviewed to identify areas for improvement in teaching strategies, learning activities, or support mechanisms. Learning activities and materials are modified to enhance student engagement and ensure the model's effectiveness.

Implementing the CoD-ID Model

Implementing the CoD-ID model requires flexibility, technological accessibility, cultural inclusivity, and professional relevance.

1. **Flexibility:** The success of the CoD-ID model depends on adaptability in lesson planning and instructional strategies. Educators should regularly review and modify learning activities based on student progress and feedback. By incorporating various teaching materials—such as visual aids, interactive exercises, and peer collaboration tasks—the model can accommodate different learning styles and remain engaging.
2. **Technology Integration:** Since the model relies on digital corpus tools, access to technology and internet resources is essential. Students must be trained in using corpus analysis software to explore language independently. The inclusion of interactive tutorials, digital exercises, and step-by-step guidance ensures that all learners can effectively utilize corpus-based methods, even those with limited digital literacy.
3. **Cultural and Linguistic Sensitivity:** Given the diverse linguistic backgrounds of Public Administration students, instructional materials should reflect varied language perspectives and policy contexts. Classroom discussions can explore how language use differs across regions and governance structures, helping students develop a global understanding of administrative terminology. Additionally, educators should provide support for non-native speakers, ensuring that all students benefit equitably from corpus-driven learning.
4. **Professional Comprehension:** To implement the model effectively, ongoing professional development for educators is necessary. Instructors should receive training in corpus linguistics, data-driven learning methodologies, and technology-enhanced instruction. By engaging in workshops, collaborative research, and professional learning communities, educators can refine their technical skills and stay updated on best practices in ESP vocabulary teaching.

The CoD-ID model is specifically designed to facilitate vocabulary acquisition in ESP courses by addressing the unique challenges and needs of learners in specialized fields like Public Administration. By

integrating CL and DDL within a constructivist framework, the model promotes active learning, learner autonomy, and authentic language use. The emphasis on specialized corpora, real-world tasks, and collaborative projects ensures that students develop vocabulary knowledge and skills that are directly relevant to their field of study and future professional contexts. Through the seven stages of the model, students are guided through a process of assessment, exploration, analysis, application, and reflection, leading to a deeper and more meaningful understanding of specialized vocabulary.

Public Administration Students' Perceptions of the Corpus-Driven Instructional Model

This section presents the findings related to RQ2: *"What are Public Administration students' perceptions regarding the utilization of a corpus-driven instructional model in their ESP learning?"*. The findings are organized based on key themes that emerged from the qualitative data.

Initial Perceptions and Adaptation to Corpus-Based Learning

Initially, many students expressed unfamiliarity with corpus tools and data-driven learning (DDL). Some found the corpus interface challenging, particularly navigating the search functions and interpreting the data displays. Others were unsure how to apply corpus data to their vocabulary learning, expressing a preference for traditional methods like memorization.

"I've always learned vocabulary by writing down words and their meanings. This corpus thing seems complicated." (Student 11)

However, after receiving targeted instruction and support, including hands-on tutorials and guided practice activities, most students began to appreciate corpus-based learning and its potential.

"I didn't know about corpus before. It was hard at first, but now I like it! It's better than just memorizing words because I can see how they are actually used." (Student 30)

"I was confused how to use the corpus to find collocations. But after the practice activity, I can see how words are used in different places. It's cool!" (Student 17)

"At the beginning, I was a bit lost with the corpus tools. But the teacher explained it well, and now I think it's actually quite interesting to see how words are used in real-life examples." (Student 21)

The initial hesitation and challenges faced by some students highlight the importance of providing comprehensive introductory support and scaffolding when implementing corpus-based learning. However, the positive shift in perceptions after targeted instruction suggests that with adequate guidance, students can successfully adapt to and appreciate this approach.

Perceptions of Tailored Learning Plans and Vocabulary Focus

Students responded positively to the tailored learning plans, which allowed them to focus on vocabulary relevant to their individual goals. They appreciated the opportunity to personalize their learning and delve deeper into specific areas of interest within public administration, such as policy analysis, public management, or local governance.

"I liked choosing my own words for the project. It was fun!" (Student 25)

"We worked together in a group. It was good because we learned different words and helped each other." (Student 19)

"The tailored learning plans were very helpful because I could focus on the vocabulary that was most relevant to my interests and future aspirations in public administration. It made the learning process more efficient and motivating." (Student 2)

The positive response to tailored learning plans suggests that providing students with autonomy and choice in their vocabulary learning can significantly enhance their motivation, engagement, and overall learning outcomes.

Perceptions of Active Learning and Engagement

Students expressed enthusiasm for the active learning approach embedded in the corpus-driven instructional model. They found the hands-on corpus analysis, collaborative research tasks, and presentations on vocabulary use to be more engaging and stimulating than traditional vocabulary learning methods.

"I like finding words in the corpus. It's like a game!" (Student 1)

"We talked about words with our friends. It helped me understand better." (Student 16)

"The corpus activities were much more interactive and engaging than just reading definitions from a textbook. I enjoyed exploring real-life examples and discovering how words are used in different contexts." (Student 8)

The positive feedback on the active learning components suggests that corpus-driven instruction can effectively foster student engagement and motivation by providing opportunities for hands-on exploration, collaboration, and knowledge sharing.

Perceptions of Continuous Support and Feedback

Students valued the continuous support and feedback provided throughout the learning process. They appreciated the regular feedback sessions, peer review exercises, and instructor guidance, which helped them clarify their understanding and refine their corpus analysis skills.

"The teacher helped me when I didn't understand." (Student 18)

"My friends helped me too! We learned together." (Student 22)

"The feedback sessions were very helpful because they allowed me to clarify any doubts and get personalized guidance on how to improve my corpus analysis skills." (Student 4)

The emphasis on continuous support and feedback appears to have created a safe and encouraging learning environment where students felt comfortable seeking guidance and refining their understanding. This highlights the importance of providing ongoing support and formative feedback in corpus-driven instruction.

Perceptions of Evaluation and Reflection

Students recognized the value of the evaluation and reflection activities in consolidating their learning and promoting deeper understanding. The formative and summative assessments, which included quizzes, presentations, and reflective essays, encouraged them to think critically about their vocabulary acquisition journey.

"The quizzes helped me see how much I was learning. I did good!" (Student 24)

"I liked thinking about what I learned and how I can use it later." (Student 20)

"The evaluation activities provided me with a sense of progress and accomplishment. It was rewarding to see how much my vocabulary had improved throughout the course." (Student 7)

The positive response to evaluation and reflection activities suggests that they play a crucial role in reinforcing learning, promoting metacognition, and encouraging students to take ownership of their vocabulary development.

The data consistently indicates that Public Administration students perceive the corpus-driven instructional model positively. They appreciate the opportunity to engage with authentic language data, tailor their learning experiences, and receive continuous support and feedback. While initial challenges were noted in adapting to corpus tools and self-directed learning, these were mitigated through targeted support and scaffolding. The model appears to enhance vocabulary acquisition, foster engagement, and promote a deeper understanding of specialized terminology within the ESP context.

DISCUSSION

This study investigated the implementation and effectiveness of a corpus-driven instructional model, the CoD-ID, in an ESP course for Public Administration students. The findings provide valuable insights into the design of the model and students' perceptions of its impact on their vocabulary learning, resonating with existing research and pedagogical theories.

Effectiveness of the CoD-ID Model

The CoD-ID model, grounded in constructivist learning principles (Behrens, 2021; Tarnopolsky, 2012) and integrating CL and DDL, represents a shift from traditional vocabulary instruction. By emphasizing active learning, authentic language use, and learner autonomy, the model effectively addresses the challenges Public Administration students face in acquiring specialized vocabulary, echoing the principles of Task-Based Language Teaching (TBLT) and Project-Based Learning (PjBL) (Moore, 2018; Nurhidayah et al., 2021; Pilu et al., 2022).

The use of corpus analysis tools, such as ECOPA, allowed students to explore real-world language data and discover patterns of word usage in their field, which corroborates by Cheng (2013), and Jamal et al, (2021),

who highlighted how authentic corpus data empowers learners to successfully navigate and apply complex linguistic structures. This approach fostered a deeper understanding of vocabulary, going beyond simple definitions to explore collocations, semantic relationships, and contextual nuances, aligning with research by Boulton and Pérez-Paredes (2014), and Breyer (2009) on the potential of corpora to cultivate language awareness and analytical skills. The tailored learning plans and emphasis on active engagement further enhanced the learning experience, catering to individual needs and preferences and reflecting the principles of differentiated instruction (Tomlinson, 2014).

The findings suggest that the CoD-ID model successfully promoted vocabulary acquisition, as evidenced by students' self-reported improvements and their positive reflections on their learning progress during the interviews. Moreover, the model fostered engagement and motivation, with students expressing enthusiasm for the interactive and collaborative nature of the learning activities, supporting research by Barth and Schnell (2021) and Crawford and Csomay (2016) on the efficacy of corpus-based learning in promoting critical thinking and improving vocabulary retention.

Student Perceptions and Adaptation to Corpus-Based Learning

The initial hesitation and challenges faced by some students in adapting to corpus tools and data-driven learning (DDL) underscore the importance of providing comprehensive introductory support and scaffolding. This finding aligns with previous research highlighting the need for explicit instruction and guidance in corpus-based pedagogy (Chang & Sun, 2009; Corino & Onesti, 2019). As Nesselhauf (2003) argues, learners may require scaffolding to navigate and interpret linguistic data within-corpus analysis tools effectively. The CoD-ID model addresses this need by incorporating orientation sessions, guided exercises, and clear explanations to familiarize students with corpus tools and DDL principles. The positive shift in student perceptions after receiving this support confirms the effectiveness of such scaffolding in facilitating adaptation to this new learning approach.

In addition, the positive response to tailored learning plans and the emphasis on vocabulary focus resonates with Vygotsky's Zone of Proximal Development (ZPD) theory (Vygotsky, 1980). By allowing students to choose vocabulary relevant to their individual goals and interests, the CoD-ID model creates a learning environment where students can effectively build upon their existing knowledge and skills with appropriate support. This personalization fosters a sense of ownership and agency, empowering students to direct their learning and achieve greater success. This finding is consistent with research emphasizing the benefits of corpus-based DDL to autonomous and personalized learning in language acquisition (Hong, 2010; Lewandowska, 2014; Nadira et al., 2021; Zhu et al., 2021).

Furthermore, the enthusiasm expressed by students for the active learning components of the CoD-ID model aligns with constructivist learning theories (McHaney et al., 2018; Tarnopolsky, 2012). By engaging in hands-on corpus analysis, collaborative research tasks, and presentations, students actively construct their understanding of vocabulary and its usage in authentic contexts. This active involvement fosters deeper processing, enhances retention, and promotes greater motivation and engagement. This finding echoes previous research highlighting the positive impact of corpus-based DDL in active learning and collaborative activities on student engagement and learning outcomes (Chua, 2022; Tara Shankar Sinha, 2021; Tosun & Sofu, 2023; Yoon & Hirvela, 2004).

The value placed by students on continuous support and feedback reinforces the principles of sociocultural learning theory. The CoD-ID model provides a supportive learning environment where students receive regular feedback from instructors and peers, fostering a sense of community and encouraging collaborative learning. This ongoing support helps students clarify their understanding, correct misconceptions, and develop confidence in their corpus analysis skills. The findings support research emphasizing the crucial role of corpus-based DDL for having feedback and interaction in language development (Gaskell & Cobb, 2004; Tono et al., 2014; Tsao, 2021).

Finally, the positive response to evaluation and reflection activities underscores their importance in promoting metacognition and self-regulated learning (Zimmerman & Schunk, 2011). By engaging in formative and summative assessments and reflective writing, students develop a deeper awareness of their learning process, identify areas for improvement, and consolidate their understanding of vocabulary. This finding supports corpus research advocating for the integration of metacognitive strategies and reflective practices in language learning (Noor & Amir, 2017; Zare & Al-Issa, 2024).

This study contributes to the growing body of research on the benefits of corpus-based instruction in EFL contexts, supporting the work of researchers like Frankenberg-Garcia (2014) and Gavioli (2005), who have

demonstrated the positive impact of corpora on language learning. The findings offer valuable implications for ESP pedagogy, particularly in specialized fields like Public Administration. By adopting a corpus-driven approach, educators can create more engaging and effective learning environments that empower students to develop the specialized vocabulary knowledge and skills necessary for success in their academic and professional pursuits.

Future research could explore the long-term impact of the CoD-ID model on vocabulary retention and application, drawing on theories of memory and cognitive processing. It would also be valuable to investigate the effectiveness of the model in different ESP contexts and with diverse learner populations, considering sociocultural factors and individual learning differences. Further research could also delve deeper into the specific challenges and benefits of implementing corpus-driven instruction, as well as explore the optimal integration of technology and assessment practices, drawing on principles of educational technology and assessment design.

CONCLUSIONS

This study explored the implementation of a corpus-driven instructional model, the CoD-ID, in an ESP course for Public Administration students, aiming to address the challenges of acquiring specialized vocabulary in this field. The findings revealed that the CoD-ID model, grounded in constructivist learning principles and integrating Corpus Linguistics (CL) and Data-Driven Learning (DDL), effectively facilitated vocabulary acquisition and fostered student engagement. The model's emphasis on active learning, authentic language use, and learner autonomy, through the use of corpus analysis tools like ECOPA, enabled students to develop a deeper understanding of vocabulary in context. The tailored learning plans and focus on real-world applications further enhanced the learning experience, catering to individual needs and promoting the development of skills relevant to the field of Public Administration. Students' perceptions of the CoD-ID model were largely positive, with many appreciating the opportunity to engage with authentic language data, personalize their learning, and receive continuous support and feedback. While initial challenges were noted in adapting to corpus tools and self-directed learning, these were mitigated through targeted support and scaffolding. The findings of this study offer valuable implications for ESP pedagogy, suggesting that incorporating corpus-driven instruction can effectively enhance vocabulary acquisition, foster engagement, and promote a deeper understanding of specialized terminology. By embracing a corpus-driven approach, educators can empower students to become active and autonomous language learners, capable of navigating the complexities of specialized discourse in their chosen fields. This study contributes to the ongoing development of innovative instructional designs that promote effective and engaging language learning in ESP contexts. The CoD-ID model provides a promising framework for enhancing vocabulary acquisition and empowering students to succeed in their academic and professional pursuits within specialized fields like Public Administration.

REFERENCES

- Abdushukurova, U. (2024). Decoding language: Innovative approaches to teaching grammar and vocabulary. *Theory and Analytical Aspects of Recent Research*, 2(25), 329–345.
- Afzal, N. (2019). A study on vocabulary-learning problems encountered by BA English majors at the university level of education. *Arab World English Journal (AWEJ) Volume*, 10.
- Ali Al-Qahtani, A. (2021). The integration of corpus-based approach with EFL academic writing in the Saudi context. *International Journal of English Language and Literature Studies*, 10(1), 22–45. <https://doi.org/10.18488/journal.23.2021.101.22.45>
- Awaah, F., Okebukola, P. A., Ebisin, A., Agbanimu, D., Peter, E. O., Ajayi, O. A., Gbeleyi, O. A., Onyewuchi, F. A., Oladejo, A. I., & Adewusi, M. A. (2021). Influence of gender and career interest on African university students' perceived difficult concepts in the study of public administration. *Teaching Public Administration*, 39(2), 227–245.
- Awaah, F., Okebukola, P., Alfa, A. A., Yeboah, S., Anagba, K., & Arkorful, H. (2021). Developing public administration education by focusing on difficult key concepts: The case of Nigeria and Ghana. *Social Sciences & Humanities Open*, 4(1), 100136.
- Barth, D., & Schnell, S. (2021). *Understanding corpus linguistics*. Routledge.

- Behrens, H. (2021). Constructivist approaches to first language acquisition. *Journal of Child Language*, 48(5), 959–983. <https://doi.org/10.1017/S0305000921000556>
- Boru, L. (2012). Computer-assisted corpus-based college English vocabulary teaching. *2012 7th International Conference on Computer Science & Education (ICCSE)*, 1864–1867. <https://doi.org/10.1109/ICCSE.2012.6295435>
- Boulton, A. (2010). Data-driven learning: Taking the computer out of the equation. *Language Learning*, 60(3), 534–572. <https://doi.org/10.1111/j.1467-9922.2010.00566.x>
- Boulton, A. (2017). Corpora in language teaching and learning. *Language Teaching*, 50(4), 483–506. <https://doi.org/10.1017/S0261444817000167>
- Boulton, A., & Pérez-Paredes, P. (2014). ReCALL special issue: Researching uses of corpora for language teaching and learning Editorial Researching uses of corpora for language teaching and learning. *ReCALL*, 26(2), 121–127. <https://doi.org/10.1017/S0958344014000068>
- Boulton, A., & Tyne, H. (2015). Corpus-based approaches to language learning: Towards DDL for all? *Language Learning & Technology*, 19(3), 1–24.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597.
- Breyer, Y. (2009). Learning and teaching with corpora: Reflections by student teachers. *Computer Assisted Language Learning*, 22(2), 153–172. <https://doi.org/10.1080/09588220902778328>
- Chang, W.-L., & Sun, Y.-C. (2009). Scaffolding and web concordancers as support for language learning. *Computer Assisted Language Learning*, 22(4), 283–302.
- Cheng, W. (2013). Corpus-based linguistic approaches to critical discourse analysis. *The Encyclopedia of Applied Linguistics*, 1353–1360.
- Chua, S. M. (2022). Compiling and analysing a large corpus of online discussions to explore users' interactions. *Applied Corpus Linguistics*, 2(2), 100017. <https://doi.org/10.1016/j.acorp.2022.100017>
- Corino, E., & Onesti, C. (2019). Data-driven learning: A scaffolding methodology for CLIL and LSP teaching and learning. *Frontiers in Education*, 4. <https://doi.org/10.3389/educ.2019.00007>
- Crawford, W. J., & Csomay, E. (2016). *Doing corpus linguistics* (First publ). Routledge.
- Crosthwaite, P. (2019). *Data-Driven Learning for the Next Generation* (P. Crosthwaite, Ed.). Routledge. <https://doi.org/10.4324/9780429425899>
- Crosthwaite, P., Luciana, & Schweinberger, M. (2021). Voices from the periphery: Perceptions of Indonesian primary vs secondary pre-service teacher trainees about corpora and data-driven learning in the L2 English classroom. *Applied Corpus Linguistics*, 1(1), 100003. <https://doi.org/10.1016/j.acorp.2021.100003>
- Crosthwaite, P., Luciana, & Wijaya, D. (2023). Exploring language teachers' lesson planning for corpus-based language teaching: a focus on developing TPACK for corpora and DDL. *Computer Assisted Language Learning*, 36(7), 1392–1420. <https://doi.org/10.1080/09588221.2021.1995001>
- Egbert, J., Larsson, T., & Biber, D. (2020). *Doing linguistics with a corpus: Methodological considerations for the everyday user*. Cambridge University Press.
- Farida, U., Nurung, J., Misnawati, M., Yusriadi, Y., Tamsah, H., Anwar, A., & Heryati, Y. (2020). Warmer and filler in increasing students vocabulary mastery. *Psychology and Education*, 57(8), 763–772. <https://doi.org/10.17762/pae.v57i8.1010>
- Flanigan, K., & Greenwood, S. C. (2007). Effective content vocabulary instruction in the middle: Matching students, purposes, words, and strategies. *Journal of Adolescent & Adult Literacy*, 51(3), 226–238. <https://doi.org/10.1598/JAAL.51.3.3>
- Flowerdew, L. (2015). Data-driven learning and language learning theories. In A. Leńko-Szymańska & A. Boulton (Eds.), *Multiple Affordances of Language Corpora for Data-driven Learning*. John Benjamins Publishing Company .

- Frankenberg-Garcia, A. (2014). How language learners can benefit from corpora, or not. *Recherches En Didactique Des Langues et Des Cultures*, 11(1). <https://doi.org/10.4000/rdlc.1702>
- Gaskell, D., & Cobb, T. (2004). Can learners use concordance feedback for writing errors? *System*, 32(3), 301–319.
- Gavioli, L. (2005). *Exploring Corpora for ESP Learning*. John Benjamins Publishing Company.
- Gnyawali, B. D. (2010). *The need of English in public administration* [Thesis, Central Department of Education]. <https://elibrary.tucl.edu.np/handle/123456789/21216>
- Halici Page, M., & Mede, E. (2018). Comparing task-based instruction and traditional instruction on task engagement and vocabulary development in secondary language education. *The Journal of Educational Research*, 111(3), 371–381.
- Hong, S. C. (2010). EFL Learners' Consciousness-raising through a corpus-based approach. *English Teaching*, 65(1).
- Huang, L.-S. (2011). Corpus-aided language learning. *ELT Journal*, 65(4), 481–484. <https://doi.org/10.1093/elt/ccr031>
- Hyland, K., & Tse, P. (2007). Is there an “Academic vocabulary”? *TESOL Quarterly*, 41(2), 235–253. <https://doi.org/10.1002/j.1545-7249.2007.tb00058.x>
- Jamal, J., Shafqat, A., & Afzal, E. (2021). Teachers' perceptions of incorporation of corpus-based approach in English language teaching classrooms in Karachi, Pakistan. *Liberal Arts and Social Sciences International Journal (LASSIJ)*, 5(1), 611–629. <https://doi.org/10.47264/idea.lassij/5.1.40>
- Karakoç, D., & Köse, G. D. (2017). The impact of vocabulary knowledge on reading, writing and proficiency scores of EFL learners. *Journal of Language and Linguistic Studies*, 13(1), 352–378.
- Kareva, V. (2013). English for specific purposes: Public administration and political sciences. *Procedia - Social and Behavioral Sciences*, 70, 1477–1481. <https://doi.org/10.1016/j.sbspro.2013.01.214>
- Kilickaya, F., & Krajka, J. (2010). Comparative usefulness of online and traditional vocabulary learning. *Turkish Online Journal of Educational Technology-TOJET*, 9(2), 55–63.
- Kinsella, C., & Waite, B. (2021). Identifying and developing desirable soft skills for public service. *Teaching Public Administration*, 39(3), 337–350. <https://doi.org/10.1177/0144739420931552>
- Laufer, B. (2017). From word parts to full texts: Searching for effective methods of vocabulary learning. *Language Teaching Research*, 21(1), 5–11. <https://doi.org/10.1177/1362168816683118>
- Lewandowska, A. (2014). Using corpus-based classroom activities to enhance learner autonomy. *Konińskie Studia Językowe*, 2(3), 237–255.
- Lin, M. H. (2019). Becoming a DDL teacher in English grammar classes: A pilot study. *Journal of Language Teaching and Learning*, 9(1), 70–82. <https://www.jltl.com.tr/index.php/jltl/article/view/75>
- Lin, M. H., & Lee, J.-Y. (2015). Data-driven learning: Changing the teaching of grammar in EFL classes. *ELT Journal*, 69(3), 264–274. <https://doi.org/10.1093/elt/ccv010>
- M. Al Zahrani, S., & Chaudhary, A. (2022). Vocabulary learning strategies in ESP context: Knowledge and implication. *Arab World English Journal*, 13(1), 382–393. <https://doi.org/10.24093/awej/vol13no1.25>
- McHaney, R., Reiter, L., & Reychav, I. (2018). Immersive simulation in constructivist-based classroom e-learning. In *International Journal on E-Learning* (Vol. 17, Issue 1, pp. 39–64). <https://www.learntechlib.org/primary/p/149930/>
- McKeown, M. G. (2019). Effective vocabulary instruction fosters knowing words, using words, and understanding how words work. *Language, Speech, and Hearing Services in Schools*, 50(4), 466–476. https://doi.org/10.1044/2019_LSHSS-VOIA-18-0126
- Men, H. (2020). Data-driven learning in enhancing learners' language idiomaticity. *International Journal of Emerging Technologies in Learning (IJET)*, 15(23), 27. <https://doi.org/10.3991/ijet.v15i23.19023>
- Meunier, F. (2020). Data-driven learning: From classroom scaffolding to sustainable practices. *EL.LE*, 2. <https://doi.org/10.30687/ELLE/2280-6792/2019/02/010>

- Meyer, B. (2023). Corpus-based studies of public service interpreting 1. In *The Routledge Handbook of Public Service Interpreting* (pp. 76–88). Routledge.
- Misnawati, M. (2024a). *Corpus linguistics in English for public administration in Indonesian higher education context* [Dissertation]. Universitas Negeri Makassar.
- Misnawati, M. (2024b). *English Corpus of Public Administration (ECOPA)*. Yayasan Cendekiawan Indonesia Timur.
- Misnawati, M., Anwar, W. P., & Astri, Z. (2024). A corpus linguistics study of frequent collocations in public administration. *Proceedings of ICoLT-Hybrid Conference*, 1(1), 40–52.
- Misnawati, M., Atmowardoyo, H., Sulaiman, I., Bin Tahir, S. Z., & Yusriadi, Y. (2025). Steps for developing the English Corpus of Public Administration (ECOPA) for public administration students: A qualitative corpus approach. *Indonesian Journal of Applied Linguistics*, 14(3), 553–568. <https://doi.org/10.17509/ijal.v14i3.67603>
- Misnawati, M., Atmowardoyo, H., Sulaiman, I., Yusriadi, Y., & Rahman, A. (2024). Unveiling the lecturers' and students' needs in English for public administration program: Essential vocabulary topics, instructional methods, and learning challenges. *Register Journal*, 17(1), 100–122. <https://doi.org/10.18326/rgt.v17i1.100-122>
- Misnawati, M., Nur, S., & Tahir, S. Z. (2024). Corpus linguistics today: A qualitative approach. *Research and Innovation in Applied Linguistics [RIAL]*, 2(1), 45–62. <https://doi.org/10.31963/rial.v2i1.4486>
- Misnawati, M., Yusriadi, Y., Astri, Z., Abbas, A., & Asbar, A. (2025). Exploring teachers' initial perceptions of Corpus linguistics and their readiness to incorporate Corpora in classroom instruction: A qualitative analysis. *The Qualitative Report*, 30(1), 3024–3042. <https://doi.org/10.46743/2160-3715/2025.6867>
- Moore, P. J. (2018). Task-based language teaching (TBLT). *The TESOL Encyclopedia of English Language Teaching*, 1–7.
- Morse, R. S., & Stephens, J. B. (2012). Teaching collaborative governance: Phases, competencies, and case-based learning. *Journal of Public Affairs Education*, 18(3), 565–583.
- Nadira, B., Makhlof, D., & Amroune, M. (2021). Personalized online learning: Context driven massive open online courses. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 16(6), 1–15. <http://doi.org/10.4018/IJWLTT.20211101.0a8>
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Nation, P. (2021). Is it worth teaching vocabulary? *TESOL Journal*, 12(4). <https://doi.org/10.1002/tesj.564>
- Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some implications for teaching. *Applied Linguistics*, 24(2), 223–242. <https://doi.org/10.1093/applin/24.2.223>
- Noor, N. M., & Amir, Z. (2017). The effect of multiple intelligences on DDL vocabulary learning. *International Journal of Applied Linguistics and English Literature*, 6(2), 182–191.
- Nurhidayah, I. J., Wibowo, F. C., & Astra, I. M. (2021). Project Based Learning (PjBL) learning model in science learning: Literature review. *Journal of Physics: Conference Series*, 2019(1), 012043.
- Nurlybaeva, G. (2022). The creation of international collaborative governance discourse during the process of teaching vocabulary at the university. *Teaching Public Administration*, 40(3), 422–435. <https://doi.org/10.1177/01447394211058165>
- Pilu, R., Cahya, P., & Misnawati. (2022). Project-based learning context: The practice in tertiary education in EFL. *The 20th AsiaTEFL – 68th TEFLIN – 5th INELTAL Conference Proceedings*, 638–644.
- Qian, D. D., & Lin, L. H. F. (2019). The relationship between vocabulary knowledge and language proficiency. *The Routledge Handbook of Vocabulary Studies*, 66–80.
- Reber, U. (2019). Overcoming language barriers: Assessing the potential of machine translation and topic modeling for the comparative analysis of multilingual text corpora. *Communication Methods and Measures*, 13(2), 102–125.
- Rosyada-AS, A., & Apoko, T. W. (2023). Investigating English vocabulary difficulties and its learning strategies of lower secondary school students. *Journal of Languages and Language Teaching*, 11(3), 489–501.

- Rowe, M. L. (2013). Decontextualized language input and preschoolers' vocabulary development. *Seminars in Speech and Language, 34*(04), 260–266.
- Santillan, J. P., & Daenos, R. G. (2020). Vocabulary knowledge and learning strategies of senior high school students. *Universal Journal of Educational Research, 8*(6), 2474–2482. <https://doi.org/10.13189/ujer.2020.080631>
- Santoso, D. R., Mursyidah, L., & Taufiq, W. (2023). Public administration study program needs for public speaking ability in english to improve graduate quality. *Indonesian Journal of Cultural and Community Development, 14*(2). <https://doi.org/10.21070/ijccd2023939>
- Schaeffer-Lacroix, E. (2019). Barriers to trainee teachers' corpus use. In *Data-Driven Learning for the Next Generation* (pp. 47–64). Routledge.
- Schmitt, N. (1997). Vocabulary learning strategies. *Vocabulary: Description, Acquisition and Pedagogy, 199227*, 4–6.
- Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual*. Springer.
- Sinatra, R., Zygoris-Coe, V., & Dasinger, S. B. (2012). Preventing a Vocabulary Lag: What Lessons Are Learned From Research. *Reading & Writing Quarterly, 28*(4), 333–357. <https://doi.org/10.1080/10573569.2012.702040>
- Syaifudin, R., Sari, A. W., Trisna Paramita, A. P., & Yanti, T. S. (2020). Students' receptive vocabulary size and academic performance: Exploring possible relationship. *Proceedings of the International Conference on English Language Teaching (ICONELT 2019)*. <https://doi.org/10.2991/assehr.k.200427.041>
- Tara Shankar Sinha. (2021). EFL learners' perception of and attitude to corpus as a vocabulary learning tool. *The Reading Matrix: An International Online Journal, 21*(2), 106–119. <https://www.readingmatrix.com/files/25-3ds10cs0.pdf>
- Tarnopolsky, O. (2012). *Constructivist Blended Learning Approach*. Versita Ltd. <https://doi.org/10.2478/9788376560014>
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners. Association for Supervision and Curriculum Development*. (Second Edition). ASCD.
- Tono, Y., Satake, Y., & Miura, A. (2014). The effects of using corpora on revision tasks in L2 writing with coded error feedback. *ReCALL, 26*(2), 147–162. <https://doi.org/10.1017/S095834401400007X>
- Tosun, S., & Sofu, H. (2023). The effectiveness data-driven vocabulary learning: Hands-on concordancing through a pedagogical corpus. *Journal of Language and Education, 9*(3), 176–190. <https://doi.org/10.17323/jle.2023.12426>
- Tsao, J.-J. (2021). Effects of EFL learners' L2 writing self-efficacy on engagement with written corrective feedback. *The Asia-Pacific Education Researcher, 30*(6), 575–584. <https://doi.org/10.1007/s40299-021-00591-9>
- Ünaldi, İ., Bardakci, M., Akpınar, K. D., & Dolaş, F. (2013). A comparison of contextualized, decontextualized and corpus-informed vocabulary instruction: A quasi-experimental study. *Dil ve Edebiyat Eğitimi Dergisi, 2*(8), 78–95.
- Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard University Press. <https://doi.org/10.2307/j.ctvjf9vz4>
- Watson, R. P., & Lynch, T. D. (1998). Plain English and public administration. *Public Policy and Administration, 13*(1), 107–114. <https://doi.org/10.1177/095207679801300108>
- Wright, T. S., & Cervetti, G. N. (2017). A systematic review of the research on vocabulary instruction that impacts text comprehension. *Reading Research Quarterly, 52*(2), 203–226. <https://doi.org/10.1002/rrq.163>
- Yoon, H., & Hirvela, A. (2004). ESL student attitudes toward corpus use in L2 writing. *Journal of Second Language Writing, 13*(4), 257–283.
- Yunus, K. (2022). Pedagogical applications of corpus linguistics in the twenty-first century. In *Current Research in Language, Literature and Education Vol. 3* (pp. 114–128). Book Publisher International (a part of Sciencedomain International). <https://doi.org/10.9734/bpi/crlle/v3/2348C>

- Zare, J., & Al-Issa, A. (2024). Exploring task engagement strategies in DDL-enhanced tasks: Insights from EFL learners. *Contemporary Educational Psychology, 78*, 102299.
- Zhu, J., Zhu, C., & Tsai, S.-B. (2021). Construction and analysis of intelligent english teaching model assisted by personalized virtual corpus by big data analysis. *Mathematical Problems in Engineering, 2021*.
- Zimmerman, B. J., & Schunk, D. H. (2011). Self-regulated learning and performance: An introduction and an overview. *Handbook of Self-Regulation of Learning and Performance*, 15–26.