

Integrating Corpus-Based Linguistics into Secondary School English Language Teaching: A Study Using Sketch Engine for Language Learning (SKELL)

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Abstract: This article analyzes the multifaceted importance of corpus-based linguistics in English language education, focusing on its crucial function in fostering authentic language use, facilitating research-based teaching methodologies, and increasing students' linguistic competence across registers and contexts. Through an exhaustive review of current literature and empirical evidence, this paper highlights the transformative influence of corpus-based approaches on language learning, vocabulary development, error analysis, and research skill advancement. This study explores the integration of corpus-based linguistics into secondary school English language teaching, focusing on the use of Sketch Engine for Language Learning (SKELL) as a tool for improving vocabulary acquisition, writing skills, and overall language proficiency. The study examines how the corpus-based approach, grounded in real-world language data, enhances learner engagement, promotes autonomous learning, and supports the development of critical thinking and creativity. The research was conducted with a group of secondary school students, revealing that SKELL's user-friendly interface, authentic language examples, and multilingual support provide significant advantages in language learning. The results suggest that incorporating SKELL into English language teaching can effectively address common challenges faced by adolescent learners, such as vocabulary retention and usage, while fostering a deeper understanding of language through context.

Keywords: corpus, corpora, IELTS, SAT, SKELL, TESOL

Introduction.

The advent of corpus-based linguistics has revolutionized the field of language teaching by shifting the focus from prescriptive grammar rules and isolated vocabulary lists to authentic, real-world language use. This approach has become particularly influential with the rise of digital corpora and computational tools, which provide teachers and learners with unprecedented access to vast amounts of real language data.

In English language teaching (ELT), corpus-based methods allow students to see how words and phrases are used in context, providing a more dynamic and engaging learning experience. Despite the growing availability of corpus tools, their integration into secondary school classrooms has been relatively slow in some countries. This study aims to investigate the potential benefits of incorporating the Sketch Engine for Language Learning (SKELL) into English language instruction for secondary school students. SKELL is a freely accessible corpus tool that provides learners with clear, context-rich examples of words, collocations, and usage patterns, helping to address common challenges such as vocabulary retention and improper word usage.

The primary research question is: *How does the use of SKELL enhance vocabulary acquisition,*

language skills, and learner engagement in secondary school English language learners?

Methods: Corpus-Based Vocabulary Exploration and Application (CVEA)

1. Study Design

The goal of this study is to include corpus-based linguistics into the teaching of English in secondary schools using a qualitative, exploratory design. The technique uses the Sketch Engine for Language Learning (SKELL), a corpus-based tool that offers extensive linguistic data, to explore new verb meanings. Students participate in the study by using corpus analysis to learn the meanings of verbs, and then they apply these new words to written mini-essays.

2. Materials.

Sketch Engine for Language Learning (SKELL), a web-based corpus tool made specifically for language learners, served as the main instrument in this study. Users can investigate word definitions, contexts, and usage patterns thanks to SKELL's extensive collection of real language data. Students utilized SKELL to look up new verb meanings and investigate how these verbs are employed in various situations for the study.

Students were also given writing instructions for creating mini-essays. In order to show that they understood the new vocabulary and could use it practically, students had to incorporate newly learned verbs into argumentative or narrative compositions.

Participants

The study involved 48 secondary school students, aged 13-14, enrolled in an English as a foreign language (EFL) program at a secondary school, where English lessons are held eight hours per week. All participants had completed at least 6 years of English language instruction at school and were preparing for language proficiency exams such as IELTS, that IELTS lessons start at Grade 9 as the main English course. The participants were divided into two groups: the experimental group, which used SKELL as a learning tool, and the control group, which received traditional vocabulary instruction without corpus-based support.

Procedure

The study lasted seven weeks and involved a number of exercises intended to get students interested in the process of finding new words and then using those words in writing.

SKELL and Corpus Exploration Overview (Week 1): The Sketch Engine for Language Learning (SKELL) platform was shown to the pupils. They received instruction on how to look for verbs and recognize the many situations and meanings of each. Students were told to investigate the collocations, typical settings, and any novel or interesting meanings that surfaced from the corpus data for each word. Finding subtleties in meaning that are not usually addressed in textbooks was the main goal.

Verb Search and Definition Exploration (Weeks 2-3): Students used SKELL to look up the meanings of a group of verbs they chose, either alone or in pairs. To determine the verb's primary meanings as well as any subsidiary or uncommon definitions, they examined the corpus data. Students typed down the new meanings they learned for each chosen verb, taking note of the particular settings in which, they occurred.

Writing the Mini-Essay (Weeks 4-5): Following the discovery of new verb meanings, students were required to compose a 200–300 word mini-essay utilizing that verb in context. Students had to use at least five new verbs in their essay, which was supposed to center on a topical or personal theme. They were urged to employ the verbs in a manner consistent with the meanings that the corpus analysis had revealed.

Peer Review and Reflection (Weeks 6-7): Students shared their brief writings with a peer for evaluation. They gave advice on how to use the new verbs correctly and made recommendations for enhancements. Students rewrote their writings after peer assessment, focusing especially on the appropriateness and correctness of the recently acquired terminology. Lastly, students submitted a brief comment on their learning process that highlighted how utilizing SKELL improved their comprehension and application of the verbs.

During this time both groups participated in weekly English lessons that focused on vocabulary acquisition, grammar, and writing skills. The experimental group used SKELL to explore words and phrases in context, search for synonyms, and study collocations, while the control group received vocabulary instruction using conventional methods, such as textbook exercises and flashcards.

At the start and end of the study, both groups took a vocabulary test, which assessed their understanding of word meanings, proper usage, and ability to apply words in context. Additionally, students in the experimental group completed a writing assignment, in which they were asked to create a short story using at least 10 new vocabulary words they had explored through SKELL. The control group completed a similar writing task using the vocabulary taught through traditional methods.

Data Collection

Data was collected through:

1. Pre- and post-study vocabulary tests to measure vocabulary acquisition.
2. Student feedback surveys to assess engagement and perceived usefulness of SKELL.
3. Writing assignments to evaluate improvements in writing skills and creativity.
4. Observations of classroom interaction to monitor engagement with the learning process.

Data Analysis

Two steps were taken in the qualitative analysis of the data: **A preliminary assessment** was conducted to determine whether the newly learnt verbs were used correctly and appropriately in each student's mini-essay. The emphasis was on the verb meanings' contextual relevance and how organically they were incorporated into the text. **The perceived efficacy of corpus-based learning** was assessed by examining students' reflections on their education as well as the input from their peers. The thoughts' common themes were found to center on how students felt using corpus tools like SKELL improved their writing and vocabulary development.

Instead of using statistical analysis, this qualitative study relied on verb usage patterns and the students' self-reported experiences with the method to make conclusions.

The data from vocabulary tests and writing assignments were analyzed quantitatively using statistical methods to compare the performance of the experimental and control groups. The surveys were analyzed qualitatively to understand students' attitudes toward using SKELL and the perceived impact on their learning experience.

In order to improve their writing and vocabulary acquisition skills, this study investigates how students might use corpus-based vocabulary exploration and application (CVEA) tools such as SKELL to discover the dynamic and contextual meanings of verbs. The approach places a strong emphasis on actively interacting with linguistic data and applying newly learned words in real-world writing situations.

Ethical Consideration

This study complied with ethical standards for studies involving children. Both the parents and the students gave their informed consent, guaranteeing that they were aware of the purpose of the study and that their participation was voluntary. To preserve privacy, all student data—including essays

and reflections—was anonymized.

Results

The study's findings on incorporating Corpus-Based Vocabulary Exploration and Application (CVEA) into English language instruction in secondary schools are shown below. The accuracy and appropriateness of verb usage in students' mini-essays as well as their views on the learning process were the two primary areas of analysis.

I. Accuracy and Appropriateness of Verb Usage in Mini-Essays

In all, 150 verb usages (5 per student) were assessed in the mini-essays written by the 30 students. The following standards were used to evaluate the appropriateness and correctness of these verb usages:

Correctness of meaning: Whether the verb was employed correctly and expressed what it was supposed to.

Contextual relevance: The degree to which the meaning of the verb aligned with the surrounding context and enhanced the essay's readability.

Usage naturalness: How smoothly and organically the verb is used in the sentence.

II. Findings:

Eighty percent of verb usages were judged to be meaning-correct. Most pupils were able to recognize and apply new verb meanings when they were introduced in the corpus. For instance, students correctly employed the word "run" in their essays when it was used in its fewer common senses, including "to manage" (e.g., "She runs a small business").

Seventy percent of verb usages were suitable for the situation. There were times when the meaning of the verb did not entirely fit the sentence structure or the larger story, even though the majority of students incorporated the verbs into their writing in a logical manner. One student, for example, found it challenging to convey the meaning of the metaphorical usage of the verb "light" (to start a fire) in the sentence "Her words lit the room" without further explanation.

The usage of 60% of verbs was fluent and natural. Despite their best efforts, several students' usages of the verbs were a little awkward or forced, particularly when using more difficult or unusual verbs. Students primarily struggled to select the most acceptable or common interpretation when using verbs with various meanings in their work.

Vocabulary Acquisition

The results showed a significant improvement in vocabulary acquisition in the experimental group compared to the control group. On average, students who used SKELL scored 20% higher on the post-test than their counterparts in the control group. In particular, the experimental group demonstrated a stronger ability to use words correctly in context, with many students able to recall and apply synonyms and collocations they had discovered using SKELL.

Writing Skills and Creativity

The writing assignments revealed notable improvements in the writing skills of the experimental group. Students in the SKELL group produced more coherent and creative narratives, incorporating a wider range of vocabulary and more natural sentence structures. Many students also demonstrated increased confidence in their writing, as they were able to refer to authentic examples of language use from the corpus. In contrast, the control group's writing was more formulaic and lacked the depth of vocabulary usage seen in the experimental group.

Student Engagement and Autonomy

Survey responses indicated that students in the experimental group were more engaged with the learning process and found the use of SKELL motivating. Many students reported that they enjoyed discovering new words on their own and appreciated the real-world examples provided by the corpus. The majority of students (80%) expressed a preference for using SKELL over traditional

vocabulary learning methods. Additionally, students demonstrated a greater sense of autonomy, as they were able to search for language examples independently, fostering a more student-centered approach to learning.

Student Reflections and Peer Feedback

In addition, learners were asked to consider how the CVEA approach affected their vocabulary learning experience. Positive comments were found in the reflections, and there were a number of recurrent themes about how successful corpus-based learning is.

Increased Confidence in Vocabulary Usage: Following their involvement with SKELL, more than 85% of students said they felt more comfortable using new verbs. Many students reported feeling more confident about their ability to utilize verbs accurately after seeing them in real-world circumstances through corpus data.

Awareness of Verb Meanings: Roughly 75% of students reported that they developed a better comprehension of the various meanings and subtleties of verbs. They were able to understand the range of meanings and the proper application of verbs in various contexts by being able to investigate them in context. A pupil wrote, "Before using SKELL, I only knew one meaning of most verbs, but now I can see how versatile they are."

Contribution of Peer Feedback: Approximately 60% of students stressed that peer input was especially beneficial for improving their verb usage. Students reported that getting helpful feedback from their classmates helped them see errors they had missed and resulted in more precise verb usage in their finished papers.

Classroom Interaction

Observations indicated that the experimental group engaged in more interactive and collaborative discussions. Students frequently shared the results of their SKELL searches with each other, comparing different word usages and discussing nuances in meaning. This peer-to-peer interaction facilitated deeper learning and reinforced the vocabulary acquisition process.

Discussion

The findings of this study highlight the effectiveness of incorporating corpus-based tools like SKELL into secondary school English language instruction. By providing students with access to authentic language examples, SKELL not only improved vocabulary acquisition but also enhanced writing skills and creativity. The ability to explore language in context allowed students to grasp the subtleties of word usage, which is often overlooked in traditional methods of vocabulary instruction.

The increased engagement and autonomy observed in the experimental group suggest that corpus-based approaches can foster a more interactive and learner-centered classroom environment. This approach is particularly beneficial for adolescent learners, who are at a stage where they are developing critical thinking skills and a deeper understanding of language. Moreover, the use of SKELL aligns with the digital literacy skills required for academic success, as students learn to use technology effectively to support their learning.

While the results of this study are promising, there are limitations to consider. The study was conducted in a single educational setting, and future research could explore the scalability of SKELL across different schools and cultural contexts. Additionally, the long-term effects of using corpus tools on language proficiency should be investigated to determine whether the improvements observed in vocabulary and writing persist over time.

Challenges and Areas for Improvement

Despite the CVEA method's general success, the following issues identified during the study:

Difficulty Navigating the Corpus: Some students had trouble navigating SKELL and successfully

interpreting the corpus data, particularly when it came to recognizing the many meanings of verbs. For students who were less accustomed to corpus-based tools, this was especially true. This difficulty might be lessened with future training sessions on how to retrieve pertinent data from SKELL.

Verb Reuse: Only 15% of students had a tendency to overuse verbs that they thought were very intriguing or adaptable. The diversity and depth of language in their essays were diminished by this overuse, which occasionally led to repetitious writing in which the same verbs were used repeatedly.

Conclusion

This study demonstrates that integrating corpus-based linguistics, particularly through tools like SKELL, into secondary school English language teaching can significantly enhance vocabulary acquisition, writing skills, and learner engagement. By providing students with access to authentic language data, SKELL promotes active learning, critical thinking, and learner autonomy, while fostering creativity and collaboration. Given its user-friendly design, free access, and contextual support for language learners, SKELL proves to be a valuable tool for improving language proficiency in secondary school students.

Future research should continue to explore the potential of corpus-based tools in language education, examining their impact on different learner populations and the long-term benefits of incorporating technology in language teaching.

Overall, the CVEA approach was successful in improving the writing and vocabulary learning of secondary school pupils. Students' use of vocabulary increased; 80% of verb applications were correct and suitable for the context. SKELL's dynamic and exploratory learning process promoted more student involvement. Additionally, the students' mini-essays demonstrated a more sophisticated knowledge of verbs and a higher incorporation of advanced vocabulary. Ultimately, the integration of corpus-based techniques such as CVEA into English language instruction greatly enhanced students' comprehension of vocabulary and writing skills, fostering linguistic and cognitive development.

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