Applying Corpora in Developing Knowledge of Business English Terminology in Business English Classrooms

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Abstract

In the 21st century, along with the birth and development of linguistics, computer science and digital technology, corpus linguistics has experienced a strong development in the information technology age. Currently, and there have been many different useful applications of corpora in many scientific fields, especially in applied linguistics. Linguists, teachers and learners can access different corpora for a variety of purposes including teaching, learning, modeling and contrastive analysis, etc.

In this context, with an empirical research model this study focus on analyzing the effectiveness of BE corpus in developing knowledge of Business English (BE) terminology for students majoring in BE at Danang University of Foreign Languages. The results of the study can be very beneficial to a wide range of subjects, including researchers, teachers, learners, language educators and many other stakeholders in the field of Business English.

Keywords: corpus linguistics, Business English, Business English terminology, corpus, terms

Introduction

In the 21st century, along with the birth and development of the interdisciplinary science of linguistics, computer science and digital technology, there have been various useful applications of corpus linguistics all over the world. Corpus-bases linguistics has also been receiving a lot of attention from many researchers in Vietnam. Along with studies on the application of the data-driven approach in English discourse analysis, the study and construction of corpora is necessary and urgent in economic integration because of the direct relationship between linguistics and socio-economic activities (Thu, 2008).

Thanks to corpus linguistics, linguists, teachers and students have access to a wide variety of materials for different purposes such as language teaching, modeling, or comparative linguistics. However, few studies have focus on the effects of using corpora in BE classroom in VN. In this context, this study aims to apply BE corpus in developing BE terminology knowledge for students majoring in BE at Danang University of Foreign Languages.

Review of Literature
Corpus linguistics

Corpus linguistics is defined as methods of compiling corpora with modern computer technology. Corpus linguistics, to a certain extent, allows to reduce the subjective elements of the researcher and to approach the process of studying language objectively. Since the first corpus born in 1961, corpora have been built and developed in many countries around the world and these corpora have been playing an important role in the fields of applied linguistics. Typical examples of corpora include:

1. The Brown data set - Brown University Corpus - contains about a million word and phrase units in use, marked in word morphology.
2. Lancaster Corpus (LOB) – is composed of approximately a million word and phrase units.
3. The British National Corpus (BNC) covers 100 million word and phrase units. The British corpus was built in the 1990s on the basis of morphological diagrams.
In addition, a large number of English corpora have been developed with different specialized uses. Some typical examples are the Cambridge and Nottingham BE Corpus (CANBEC) datasets, the Wolverhampton BE Corpus BE datasets, the English Corpus and BE Corpus (BEC) datasets, the Bank's English datasets... In addition to the specialized corpora mentioned above, there are also corpus in German, Japanese, Chinese, Korean and etc.

The application of corpus in language teaching

Many studies have investigated the beneficial application of corpora in language teaching. To be more specific, according to the results of many studies by Chan and Liou (2005), Varely (2008), Rapti (2010), Girgin (2011) on the attitude of foreign language learners towards the application of corpus, all learners show a positive attitude along with an interest in accessing corpus in the process of foreign language learning.

In addition, according to the data-driven learning of Johns (1991), teachers need to design tasks and materials in the classroom to solve problems and tailor to specific needs of the classroom, which allows students to familiarize themselves with practical learning with a lot of authenticity. Within a framework for applying corpora by Bennett (2010), the teacher can determine the genre, select an appropriate corpus and design tasks to involve students in learning activities.

BE terminology

Business English (BE) is the English language that is use when people do business and make transactions with each other. As defined by Collins English Dictionary on-line, terminology is defined the body of specialized words related to a particular subject, science or art…etc.
Thus, terminology refers to the specialized vocabulary that features an occupation and in the same way, experts of BE need BE terminology to properly denote names, concepts, activities and pneumonia…

**Methodology**

**Participants**

The study was carried out at Danang University of Foreign Languages in Da Nang city during the period from October 2020 to June 2021 and the participants were 100 second-year BE students of Danang University of Foreign Languages. The majority of students at Danang University of Foreign Languages aged between 18 and 22 come from different provinces in Vietnam. Before entering Da Nang University of Foreign Languages, most of the students studied English at high school level and had to meet the requirements for admission to Danang University of Foreign Languages. When entering Danang University of Foreign Languages, they are required to learn Business English as one of the compulsory subjects in their bachelor programs.

**Teaching resources**

Within the quasi-experimental research design, the teacher and learners had the chance to work with Business English Corpus (BEC) compiled by the research (as the teacher). BEC is composed of texts from the course book used in the BE course, namely Business Advantage by Handford et al. (2011) and 100 articles from business columns in “The economist” newspapers published between the year 2019 and 2020. Since the learners were exposed to the BE texts which make up the corpus, BEC corpus facilitate leaners in understanding the contexts of BE terminology.

**Research procedures**

This study will be based on the basis of quantitative analysis (using SPSS software). The researcher will equally divide participants into the control group and the experimental group. The control group took BE course in the usual way without BEC corpus the experimental group took the same BE course with the application of BEC corpus.

For the experimental group, the author carried out the steps within a framework for applying corpora by Bennett (2010). After determining the genre of BE, the researcher compiled BEC corpus that suits the teaching and learning context. In the BE classrooms, the experimental group was asked to read or listen to specialized texts and were exposed to BE terms in the text. In the presentation of BE terms, the researcher introduced the experimental group to BE corpus and show them how to carry out use different functions of keyword list, collocates and concordance
lines with AntConc software. As the students were provided with BEC corpus and AntConc is a free and user-friendly software, they can autonomously use AntConc with BEC corpus with their own computers outside the classrooms. Boulton (2009) also asserts that corpus can be used by learners for reference purposes and that students can also benefit from having access to corpus. In addition, the researcher (as the teacher of the course) also applied related exercises to the group of students so that students can practice using these BE terms. As asserted by Johns (1994), teachers need to design learning activities with applied exercises that help learners discover patterns as well as word combinations in phrases.

For instance, the following figure shows the search results of the keywords accompanying the term “market” in the context of BE.

Figure: 1

The concordance lines of the keyword “market” in AntConc

After integrating the application of BEC corpus into BE classrooms, the researcher will administer test of BE terms among the control and experimental group to determine any differences in test scores between the two groups.

The test is composed of 80 test items, equally divided into two sections or components, one for receptive knowledge and another for productive knowledge of BE terminology. All of the BE terms in the test items were extracted from their textbook of Business Advantage Upper Intermediate by Handford et al. (2011). Then these terms were input into Dictionary of Business
and Management by Law (2009) for the test item prompts to ensure that all of the BE concepts belong to the group of BE terminology and all of the test item prompts are accurate and reliable.

The first and second section of the test were designed to measure receptive and productive knowledge of BE terms respectively among the participants. The first test component includes 40 multiple-choice test items for which students had to choose the best BE term for each definition or test item prompt among the four options. On the other hand, the second one covers 40 gap-filling test items which require students to fill in the most appropriate word to complete each test item prompt. Test duration is 60 minutes and the highest scores for each section is 40 points with maximum scores for the whole test being 80 points.

A pilot test was first administered on both groups of students and then Cronbach’s alpha was calculated to determine the reliability of the pilot test. The questions that were not reliable were removed from the test. The pilot test was then edited and redesigned to come up with a final-version test for two groups of participants. The test of BE terminology was carried out in the same formal condition among all the participants in BE classrooms. Thorough explanations and guidance were given at the beginning of the test so that all the participants could understand the test requirements. Test results can demonstrate the effectiveness of using BE corpus in developing knowledge of BE terminology among the students.

Findings

Statistics of participants’ scores in all test components were analyzed to determine the effect of BE corpus on student knowledge of Business English terms. To be more specific, descriptive statistics and two paired samples t-tests were performed so as to determine the differences in BE terminology knowledge between the two groups of participants.

Table 1 provides figures related to average score (mean) for the two parts of the test. As seen in Table 1, the mean scores of the experimental group (31.5, 28.6, respectively) were considerably higher than those of the control group (30.19, 26.11 respectively) in both the productive and the
receptive test component. Therefore, it can be conclusive that the experimental group outperformed the control group in both productive and receptive knowledge of Business English terminology. This finding can be justified partly by the statement that learners can easily analyze language patterns and word combinations, thanks to the "concordance lines" feature in corpora, (Hadley, 2002; cited in Chang & Sun, 2009).

In addition, the higher mean scores in receptive test component than productive counterpart are evident among both experimental and control group. Then it can be concluded that both groups of participants prove to be more competent in BE terminology receptive knowledge than BE productive one.

Table: 2
Paired sample t- test (for test section of Receptive knowledge)

<table>
<thead>
<tr>
<th>Receptive knowledge</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPERIMENTALGROUPO - CONTROLGROUP</td>
<td>2.660 00</td>
<td>3.56061</td>
<td>.50355</td>
</tr>
</tbody>
</table>

Table: 3
Paired sample t- test (for test section of Productive knowledge)

<table>
<thead>
<tr>
<th>Productive knowledge</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPERIMENTALGROUPO - CONTROLGROUP</td>
<td>3.940 00</td>
<td>2.07423</td>
<td>.29334</td>
</tr>
</tbody>
</table>
In addition, it is evident from results of paired sample t-tests in Table 2 and Table 3 that there is a statistically remarkable difference between the two groups in receptive knowledge of Business English terminology ($t = 5.283$, $df = 49$, $p < .005$, sig. 2-tailed = .000) and productive one ($t = 13.43$, $df = 49$, $p < .005$, sig. 2-tailed = .000) is evident.

In order to determine the reliability of the Business English terminology test used in this study, Cronbach’s alpha was calculated and the reliability coefficient for items is high ($\alpha = .75$ and $\alpha = .87$) for the test administered among the experimental and the control group respectively, which suggests that the test is reliable.

With a view to investigating the effect of BEC corpus on students’ knowledge of BE terminology in general, paired sample t-test were performed to compare the means of test scores of the whole test (including both test sections) among the experimental and control group (as shown in table 4,5 and 6 below).

Table: 4

<table>
<thead>
<tr>
<th>Paired Samples Statistics (for the whole test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Pair 1</td>
</tr>
<tr>
<td>EXPERIMENTALGROUP</td>
</tr>
<tr>
<td>CONTROLGROUP</td>
</tr>
</tbody>
</table>

Table: 5

<table>
<thead>
<tr>
<th>Paired Samples Correlation (for the whole test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Pair 1</td>
</tr>
</tbody>
</table>

Table: 6

<table>
<thead>
<tr>
<th>Paired sample t- test (for the whole test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Differences</td>
</tr>
<tr>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>------------</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>


There is strong evidence from the data above (t=9.391, p=0.000) that the intervention of BE corpus improved test scores of BE terminology among the experimental group. In this data set, there is a quite significant improvement in test scores, on average, by approximately 9.391 points. In addition, results from Table 5 and 6 revealed that BEC corpus application accounted for a significant proportion of the test variance, since p = 0.000 in this case (the null hypothesis is rejected) and the confidence difference interval is set at 95% with correlation of -0.267. To conclude, it can be inferred from paired sample statistics that BE corpus can enhance students’ knowledge of BE terminology at the university under investigation.

**Conclusion**

In summary, the results from this study are promising and strongly suggest the continued use of the BE corpus approach in this course. It can therefore be concluded that the application of BE corpus improves knowledge of BE terminology. This finding is in line with studies by Chan and Liou (2005), Varely (2008), Jafarpour and Koosha (2006), Jafarpour, Hashemian and Alipour (2013) which confirmed the improvement of students' vocabulary and grammar knowledge with access to corpora.

In conclusion, the findings offer an overall picture of application of BE corpora among Business English students at a university in Viet Nam. To be more specific, the results of the study reveal that there is a strong correlation between the use of BE corpus and enhanced knowledge of BE terminology.

**Suggestions and Recommendations**

However, more enhancement is evident in receptive knowledge of BE terms than productive one, which requires further efforts and attention from language educators and teachers to facilitate for students production of BE terminology. What’s more, it is of great importance for teachers to design learning activities with tasks that can assist learners analyze patterns, phrases and collocations (Johns, 1994). However, others assert that in some specific contexts, English for Specific Purposes (ESP) or Business English teachers may be tasked with checking that learners have understood terms that appear in the curriculum so that they can gain the skills to work with BE terminology in their current an future career (Dudley-Evans & St. John, 1987).

In addition, English should be presented in an authentic way to familiarize learners with the specific ways and functions that language is used in their area of expertise. ESP or Business English teachers need to be very cautious about the selection and presentation of content and pay
special attention to terminology. If teachers decide to introduce additional specialized terminology, it must be based on the specific needs of the student (Fiorito et al., 2010).

Above all, corpora can equip teachers with effective tools for effective teaching in Business English classroom contexts. It is notable that teachers are those who should master the framework for using corpora and then utilize them in the most flexible and effective way. In other words, the procedures for applying corpora and the presentation of terminology should be modified by teachers depending on teaching and learning contexts.

References


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