The Effects of Corpus-based Approach on Senior Secondary School Students' Writing Narrative Paragraph Ability

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Abstract

The study aimed to (1) analyze the effectiveness of adopting Corpus-based approach to develop students' English narrative paragraph writing skills, (2) to investigate the effects of how students use Corpus technology in paragraph writing, and (3) to examine students' attitudes towards using a corpus-based approach instructional material to enhance students' paragraph writing skills. Thirty- four Mathayomsuksa 5 students were the subjects of the study drawn by purposive sampling and the subjects were divided into different levels of English proficiency. The subjects worked on corpus-based activities in the writing course and were assigned to write narrative paragraphs based on the topics related to their daily activities. The research was quasi- experimental research which included both quantitative and qualitative research instruments. The instruments were 1) pre- and post-writing tests, 2) questionnaire, and 3) instructional plans. The results showed that the mean scores of the post-test ($\overline{X}$ = 15.94) were significantly higher than the mean score of the pre-test ($\overline{X}$ = 11.44). The overall vocabulary use fell into A1 level according the CEFR. Finally, the results from opinion questionnaire also revealed that the participants were moderately satisfied with the corpus-based instruction ($\overline{X}$ = 4.50).

Keywords: Narrative Paragraph Writing, Corpus-based Approach, Teaching and Language Corpora

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Introduction

Writing is one of the most important skills for communication and it is a transferable skill that students possess (Ranaut, 2018). The function of written language is beneficial and essential for society and education, and its status as a high social distinction at the present time (Urbanova & Oakland, 2002). Writing plays an important role in business and workplace, and also it is mainly used for communication in educational contexts (Walsh, 2010). Effective communication is important for every company's success, today more than ever. As our workplace becomes more and more global in focus, the need to be understood efficiently and correctly in English has become imperative. In business and education contexts the writing skills are extensively used for communication.

Teaching writing is a challenging task for language teachers and this prompts them to look for creative ways and approaches to teaching. Learners need to set an objective for their writing, plan it carefully, think over its layout and logical structures and then revise it. In a writing class, students have to pay attention to all of the witting aspects. Writing teachers should concentrate on teaching both grammar and vocabulary habitually. One of the best ways to attract students to writing is to have opportunities to write at the beginning of the learning process as freely as possible and evoke in them the feelings of creativity. Teaching writing would include writing strategies, define as methods of imparting necessary knowledge of the convention of writing discourse and basics of grammar and syntax through various pedagogical methods.

Corpora are also used in writing classroom to help students to produce written work successfully. There are two types of corpora use in classroom. Indirect application of corpora means the instances in which corpora can provide information on "what to teach and how to teach it" (Römer, 2011, p. 206). Thus, this type affects syllabus design and the improvement of teaching materials. On the other hand, direct application or data-driven learning (DDL) refers to introducing the learners to corpus tools where they can attempt the role of researchers by discovering and inferring meanings and grammatical rules.

The use of corpora in English language teaching is a recent phenomenon that only began a few decades back and mostly focused on the English language. Corpus tools have enabled linguistic researchers and teachers to easily analyze the writing skill which is considered as one of the most difficult skills in English teaching and learning since it requires greater potentials and originality. O'Keeffe, McCarthy, and Carter (2007) proved that language taught on textbooks is frequently based on native speakers' intuition about how they use the language rather than the actual evidence of usage (p. 21). On the contrary, the corpus can present statistically proven evidence of the language actually used which explains the new approaches relying on corpora in the language teaching field. For example, according to Johansson (2009), corpora can hugely impact language teaching in many fields. In addition, the use of corpus can influence the preparation of tests, textbooks, grammar books, dictionaries, classroom activities and syllabus design. Johansson (2009) is strongly arguing for the effective relevance of corpora in language teaching. Furthermore, frequency data combined with lines of concordances that expose the verbal environment allow great opportunities for linguistic research. Corpus tools have contributed to discovering the behavior of various lexical and grammatical features. Thus, the corpus immensely influences language teaching pedagogy and students' understanding of the English language. The place of the writing skills is emphasized in the Basic Education Core Curriculum. There is a requirement that and the primary students should be able to write information about themselves to express opinions about various matters around them. Secondary students should be also able to write to present data about themselves/experiences, news/incidents, matters and various issues of interest to society, summarize the main idea/ theme identified from analysis of matters, activities, news, incidents, and situations in accordance with their interests by writing. The students can also express opinions about activities, experiences and incidents in the local area, society, and the world.

However, writing can also be seen as the most difficult language skill for EFL learners to acquire in academic contexts (Barua, 2017). Heaton (1995) stated that writing skills are complex and difficult to teach. It requires skills from five main areas: grammatical knowledge, mechanical skill, treatment of content, stylistic skill and judgment skills. In EFL contexts where students just study the English language in classroom only and the language is not widely used in everyday life activities and in local communities. For example, EFL contexts include Thailand, Japan, China, and many European countries (Hyland, 2003). In this context, students might have language exposure only in classrooms and the opportunities to write or speak outside the classroom might be obviously limited. That is why some of them might have difficulties in both speaking and writing English successfully. In order to overcome the obstacles in writing, it is necessary to study the problems which many students face when they are writing. Corpus-based approach can be approach that can help develop students' English narrative paragraph writing skills and grammatical competence. This has hugely impacted language teaching in many fields like in the preparation of tests, textbooks, grammar books, dictionaries, classroom activities and syllabus design Johansson (2009). Furthermore, frequency data combined with lines of concordances that expose the verbal environment allow great opportunities for students to improve ion their writing. This present study is basically triggered by the students' problems in Latyaowitthayakhom School in the writing classes by enhancing them to write paragraphs. Most of them have two major problems in learning to write, namely, what to write and how to start. "What to write" problem deals with how to generate ideas whereas the second one deals with how to start writing for a composition. The second problem might be caused by students' limitation of vocabulary knowledge. Thus, the use of corpus is beneficial for students in the present study and the benefits of the corpus has been far-reaching as the corpus-based approach has helped the students to write in many ways since

language taught in textbooks is frequently based on native speakers' intuition about how they use the language rather than the actual evidence of usage (O'Keeffe, McCarthy, & Carter, 2007, p. 21). On the contrary, the corpus can present statistically proven evidence of the language use which explains the new approaches relying on corpora in the language teaching field (Johansson, 2009).

Objectives of Research

The objectives of the present study are as follows:

1. To analyze the effectiveness of adopting Corpus-based approach to develop students' English narrative paragraph writing skills.

2. To investigate the effects of how students use Corpus technology in paragraph writing.

3. To examine students' attitudes towards using a corpus-based approach instructional material to enhance students' paragraph writing skills.

Research Methodology

Participants

The participants included 34 Mathayomsuksa 5 students who were studying in the English Reading and Writing course (E32201) in the first semester of academic year 2019 at Latyaowitthayakhom School, the Secondary Area Office 42 (Nakhon Sawan). The target group was purposively selected to serve as the experimental group and they were divided into three levels which were beginner, intermediate and advanced learners, based on their English writing proficiency.

Research design

The researcher considered and examined variables to collect relevant data for analysis. The data of the present study revealed in this article adopted the quantitative approach. The data were collected from students' pre and post writing

scores, the frequency of students' vocabulary use, and satisfaction questionnaires. The main purposes of the present study were to design a corpus compilation of Basic English words for high school students and determine its effectiveness on students' writing ability. Two main steps were included; the construction and the compilation: (a) selecting sources of data and determining the target word lists for the corpus, and (b) designing the vocabulary lessons and writing activities. Based on the corpus material provided, the teacher helped the students to use the corpus data present to them electronically in their narrative paragraph writing. The vocabulary, grammar and writing lessons were made up of 5 classes with two classes in a week. A total of 20 words out of 100 words were chosen to be studied in each vocabulary class and the 20 target words were included in the vocabulary activities and were organized during the lessons, were also analyzed for collecting the students' attitudes during the instructions. To enhance presentation of the data, responses were coded into five categories, ''strongly agree, agree, no opinion, disagree, and strongly disagree" by placing 2 positive answers into the ''strongly agree and agree'' and 2 negative answers into the "disagree and strongly disagree'' categories and a final category for neutral in "no opinion". As for qualitative research, content analysis was used. The researcher interviews students by focusing on group interviews to assess the students' attitudes toward paragraph writing skills.

Instrument design and verification

Research instruments were divided into two categories. The experimental instrument involves five instructional plans of 10 hours based on the principles of English Reading and Writing (E32201) course description. There were two hours a week lasting for 60 minutes in each period. The index of item-objective congruence (IOC) developed by Rovinelli and Hambleton (1977) was used as a procedure to verify the content validity of the students' writing test, writing activities, and the questionnaire. The verification of the instruments was done by 3 experts. Finally, the

internal reliability of the instrument was checked by using Cronbach's Alpha. The reliability was 0.96, indicating a high level of reliability of the process.

Pre- and post- writing tests:

The pre-test and post- writing tests measured whether the students have made progress in their writing ability or not after learning the target words through corpus-based approach instruction. The instruments were also used to answer the research question 1, aiming to find out the effects of using a corpus-based approach on secondary school students' English narrative paragraph writing. The rubrics for writing assessment were adopted and the inter-rater was also used to confirm the fairness of the marking scores.

Vocabulary analysis

The students' use of vocabulary was taken from the pre and post-narrative paragraph writing test. The English Vocabulary Profile text inspector was used as a tool for data analysis. The vocabulary analysis was categorized into different levels (from A1 to C2 levels) according to Common European Framework of Reference for language. This method was used to confirm whether the subjects of the present study have the right knowledge of the vocabulary level specified by the Ministry of Education or not. This analysis was used to answer the research question 1.

Questionnaire

To answer the second research question, the satisfaction questionnaire was adopted to explore students' attitudes toward the corpus- based approach instruction enhancing students' narrative paragraph writing. The students' responses to the questionnaire were also analyzed by using SPSS (**S**tatistical **P**ackage for the **S**ocial **S**ciences).

Data collection procedures

This present study involved several stages of data collection in the first semester of the academic year 2019. Firstly, the researcher selected and identified

words for the construction of the corpus from New General Service List (NGSL) a collection of important words for English as a second language learners. After the corpus from NGSL and the O-NET were constructed, the identical or overlapping words were retained. Students comprehended from a total of 192 words, 74 high-frequency words have been listed to enhance their vocabulary knowledge. For example; alive, escape, frightened, horrible, realize, scream, weird etc. The third stage focused on the writing classes where the students were assigned to compile corpus of Basic English words and develop their writing skills by undertaking writing tasks. In this step, the students were asked to write a pre-test of narrative paragraphs and were also required to write 3 narrative paragraphs on the topics including "The Jungle Book, Dracula, and the Little Princess. To write the assigned paragraph the students were encouraged to use corpus for writing their paragraphs. The fourth stage involved students to take the post-paragraph writing test. After that, the students were asked to complete the questionnaires. Finally, the interview was administered by the researchers.

Results of Research

The results of the present study are divided into 3 sections. The first section deals with the scores of the pre and post-test. The second section involves the presentation of the students' vocabulary use categorized into levels according to CEFR standard. The final section presents the results of the satisfaction questionnaires. The details of each section are as follows.

Pre-test and post-test results

Prior to implementing the corpus-based approach, the researcher asked the subjects of the present study to take the pre-narrative paragraph writing test and post-test after the completion of this research project. The scores of the pre-test and post-test were analyzed using t-test. The results of each test are presented in the following table.

Table 1 Comparison of the Pre- and Post-test Scores

Tests	N	$\overline{X}$	Std. Deviation	t	P
Pre-test	34	11.44	1.52	15.34	0.05
Post-test	34	15.94	0.89		

Significance level of 0.05

Table 1 shows that the students' post-test scores of narrative paragraph writing were significantly higher than that of the pre-test at the significant level of 0.05 after the students learned how to write narrative paragraph writing activities adopting the corpus-based approach. The scores are likely to show that the students had improvement in writing narrative paragraph.

Vocabulary Improvement through Corpus-Based Approach

This section presents the students' vocabulary use taken from the pre-test and the post-test. The English Profile text inspector was used to analyze the students' vocabulary level according to CEFR standard and to witness the students' vocabulary improvement. The details of the students' vocabulary use are presented in Table 2 below.

Table 2 Statistics and details categorized from wordlist of students' Pre- and Post-Writing test

Wordlist	Pre-test		Post-test	
	Types	Tokens	Types	Tokens
A1	65.74 (58.65%)	150.09 (72.02%)	75.94 (57.49%)	176.29 (70.60%)
A2	18.11 (16.02%)	22.53 (11.05%)	23.12 (17.18%)	29.97 (12.08%)
B1	10.5 (9.29%)	12.53 (6.07%)	13.71 (10.25%)	15.71 (6.41%)
B2	5.68 (4.92%)	6.24 (3.02%)	8.35 (32.48%)	9.12 (3.80%)
C1	0.79 (0.67%)	0.79 (0.37%)	1.29 (0.90%)	1.35 (0.51%)
C2	0.97 (0.79%)	1.06 (0.46%)	1.32 (0.99%)	1.35 (0.55%)
Total	101.79 (90.34%)	193.24 (92.99%)	123.73 (93.17%)	233.79 (93.95%)

Table 2 above shows the overall of the students' vocabulary use taken from pre-and post-writing test. It can be noticed from the table that there were improvements of types and token ratio from 90.34% and 92.00% of the pretest to 93.17% and 93.95% of types and token ratio in the post-test. It can be seen that the students used more variety of word types and number of words in the post-test. When considering the students' vocabulary level, it was found that the majority of students' vocabulary use in the pre-test (types = 58.65% /tokens = 72.02%) and post-test (types = 57.49% /tokens = 70.60%) fell into A1 level. This was followed by A2, B1 levels. The students least frequently used words which belong to B2 to C2 levels. It is interesting to note that the students had learned how to use several types of words and the number of words also increased. This might be due to the effect of the corpus-based approach adopted in the present study. However, the findings suggested that the students' vocabulary level might not be compatible with the level that they are supposed to have as the majority of the word use was classified into A1 level. Therefore, these results offer vital evidence for improving students' vocabulary knowledge to meet the requirement of the Ministry of Education as the grade 12th students must have the English proficiency at B1 level.

Students' attitudes towards the use of Corpus-based Approach

This section shows the results of the students' attitudes towards the use of corpus-based approach to improve their narrative paragraph writing skills. The students were asked to complete the questionnaire after the implementation of the research project. The results of the students'attitudes are illustrated in the following table.

Table 3 Students' attitudes towards the use of corpus-based approach to develop narrative paragraph writing skills

Statement	Mean	Std. Deviation	Level of Participation
1. The lesson instruction is properly written with clear and appropriate format for easy apprehension.	4.53	0.61	Strongly Agree
2. Objectives of learning are clear to understand.	4.21	0.41	Agree
3. Teaching activities corresponding to the purpose and process of writing instruction are clearly prescribed.	4.41	0.70	Agree
4. Teaching materials corresponding to contents of writing activities and learners' level are clearly set.	4.47	0.79	Agree
5. Methods of assessment and evaluation that are consistent with objectives are prescribed.	4.50	0.83	Strongly Agree
6. The sequence of steps in the learning management plan is correctly set.	4.35	0.54	Agree
7. The lesson instruction is highly applicable in improving the writing skill and vocabulary learning.	4.35	0.49	Agree
8. Corpus-based approach used is appropriate with contents and the purpose of learning in the learning management plan.	4.29	0.80	Agree
9. The sequence of using Corpus-based approach and concordance is clear and appropriate.	4.32	0.94	Agree
10. The corpus-based approach and concordance activities used for instruction are appropriate to the learners' levels.	4.68	0.53	Strongly Agree
11. Using the corpus is essential for vocabulary learning.	4.79	0.41	Strongly Agree
12. Using the corpus is necessary for grammar learning.	4.65	0.49	Strongly Agree
13. The corpus facilitates English writing.	4.82	0.39	Strongly Agree
14. Using the corpus is essential for writing narrative paragraph.	4.85	0.36	Strongly Agree
Average	4.52	0.24	Strongly Agree

5: strongly agree, 4: agree, 3: no opinion, 2: disagree, 1: strongly disagree

Table 3 shows that the majority of the students strongly agreed with the use of corpus-based approach to enhance their narrative paragraph writing skills and the students also agreed that the corpus-based approach and concordance activities used for instruction are appropriate to the learners' levels. When considering each item of the questionnaire from the highest to the lowest of average mean scores, the highest mean score is Item 14 ($\overline{X}$ = 4.85) as the students strongly agreed that using the corpus is essential for writing narrative paragraph. This was followed by Item 13 ($\overline{X}$ = 4.82) as the students strongly agreed that the corpus facilitates English writing. Item 11 ($\overline{X}$ = 4.79) were also ranked the third place as the students also strongly agreed that using the corpus is essential for vocabulary learning. This might be confirmed by the students' vocabulary improvement shown in Table 2 above. This finding points to the usefulness of the corpus-based approach to assist students in writing narrative paragraph as this might be confirmed by the students' positive attitudes towards the use of corpus-based approach.

Conclusion and Discussion

This study presents the results of using corpus-based approach to enhance secondary school students' narrative paragraph writing skills. With respect to the first research objective, to analyze the effectiveness of adopting corpus-based approach to develop students' English narrative paragraph writing skills, it was found that the students' post-test scores are significantly higher than that of the pre-test scores. This finding is consistent with previous studies (Cobb, 1997; Creswell, 2007; Stevens, 1991) which proved that the corpus-based approach has been beneficial for learning and teaching vocabulary. The second objective of this research was to investigate the effects of how students use corpus technology in paragraph writing. It is interesting to note that the finding showed the students'

increase in vocabulary use of both types and token ratios after they had participated in corpus-based approach adopted in this study. Surprisingly the students' vocabulary level fell into A1 level according to CEFR level. In accordance with the present result, previous study (Varley, 2008) had demonstrated that corpus can help develop language skills amongst students. Finally, the third objective in this study sought out to examine students' attitudes towards using a corpus-based approach instructional material to enhance students' paragraph writing skills. The results from the questionnaire revealed that the majority of the students strongly agreed that the adopted approach helped them to develop their writing skills and vocabulary learning. This finding broadly supports the work of other studies (Yoon & Hirvela, 2004; Paker & Özcan ,2017; Nasution, 2018) in using corpus to facilitate L2 writing skills and improved students' confidence in L2 writing and the students' attitudes in using corpus-based vocabulary tasks were positive. In general, therefore, it seems that there should be the need for the students' vocabulary improvement to meet the requirement of the Ministry of Education.

Suggestions

It is advisable that the corpus-based approach can be applied to EFL writing contexts and writing. Teachers should carefully select the corpora which are appropriate for students' interests, study fields and language proficiency. It should be a further suggestion for valuable research as follows.

1. The research into corpus-based approach adopting standardized vocabulary test should be carried out in order to confirm the effectiveness of the suggested method.

2. The corpus-based approach research together with vocabulary learning strategies should be conducted to provide English language learners with effective ways to learning vocabulary in authentic contexts successfully.

3. The corpus-based approach and CEFR standard should be applied with other types of paragraph writing skills such as descriptive, compare and contrast, and cause and effect paragraph writing.

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