Relationship between Cohesive Devices and Writing Quality in Thai EFL Students' Written Works

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Abstract

The current study presents quantitative and qualitative analysis of cohesive devices in the written work of twenty Thai EFL students majoring in English in the Department of Western Languages, Srinakharinwirot University in the second semester of the academic year of 2013. It aimed to investigate the frequency of cohesive devices and also the relationship between the writing quality and the frequency of cohesive devices. The student's writing was scored twice for the writing quality while the researcher counted the frequency of cohesive devices. The inter-rater reliability between the two quality scores was calculated. After that, the relationship between writing quality and the total number of cohesive devices was analyzed. The findings indicated that students employed reference devices (49.49%) with the highest percentage, followed by lexical devices (36.31%), and conjunction devices (14.20%). For the correlation analysis, the findings revealed that there was no statistically significant relationship between the writing quality and the number of cohesive devices in Thai EFL students' written work (r = - 0.379).

Keywords: cohesive devices, cohesion, writing quality, EFL Students, English as a foreign language

Introduction

At present, writing in English is very important and it becomes even more important in the near future due to the fact that Thailand is one of Asian Economic Community (AEC) members in which English is the official business language (Wallstreetenglish, 2013). As a result, in Thai schools, students in every level are required to study English as a foreign language which includes the study of writing.

Teachers have found that English writing is the main problem for Thai EFL students among four basic skills: writing, reading, speaking, and listening. They have also discovered that many students are unable to produce academic papers which should be effective in terms of the quality and unity of structure. Thai EFL students currently have a problem of incoherence in English writing. Incoherence is considered to be a major barrier to students' success in writing because the problem of producing coherent writing is growing to be an issue in schools since most students cannot demonstrate coherence and unity (Pilus, 1996). Therefore, the challenging in teaching English writing for EFL students is to generate unified texts and appropriate teaching methods.

According to Liu (2000), writing in a second and foreign language is more complex and difficult for one's ability to use the language and to express ideas because it needs more time and skills to learn and practice. Moreover, the students have to encounter social and cognitive problems (Myles, 2000). In accordance with many studies, they found that cohesion provides the quality of coherent writing because it is regarded as a part of coherence (Lee, 2002; Phongsiriwet, 2001; Tanawong, 2014; Witte & Faigley, 1981;).

Researchers have studied over decades on cohesive devices in writing since the publication of Cohesion in English (Halliday and Hasan, 1976). They have been searching for factors distinguishing low and high quality of writings which are important to conduct writing classroom instruction. Halliday and Hasan have devoted the book to the analysis of cohesion in English texts. They have studied the grammatical and lexical devices that make a text hold together.

M.A.K. Halliday and Ruquiya Hasan's Cohesion in English defines the concept of text. They explain that text is a semantic unit which is connected together by cohesive ties. Cohesive tie "is semantic relation between an element in a text and some other elements that are crucial to the interpretation of it" (p.8). These cohesive relations generally built by one or more several types of cohesive ties. According to Halliday and Hasan (1976), cohesion is classified into two major categories: grammatical and lexical. The first category consists of the four subcategories which are reference, conjunction, substitution, and ellipsis. The lexical category consists of only one subcategory which is lexical cohesion. These two major categories and five subcategories consist of many sub-subclasses.

Definitions of Terms

1. **Cohesive features/Cohesive devices/ Cohesive ties/ Cohesion** are generally divided into five categories: reference, ellipsis, substitution, conjunction, and lexical cohesion which create coherence in texts (Halliday and Hasan, 1976). In this study, they refer to only three categories which are reference, conjunction, and lexical cohesion.
2. **Writing quality** is the quality of writing which is analytically evaluated by raters.

Objectives of the Study

This study investigated the cohesive features in the English argumentative writings written by twenty Thai EFL undergraduate students majoring in English at Srinakharinwirot University and explored the relationship between the number of cohesive features and the quality of writing in order to examine whether it had some correlations between them.

Research Questions

1. What were the cohesive devices in English writings written by Thai EFL students? How frequent were they used?
2. Was there the correlation between the number of cohesive devices and the writing quality?

Review of Literature

Cohesion is defined as the linguistic features which help making a sequence of sentences to be a complete and successful text. Cohesive devices are words or phrases that support the reader to make connections between what is already stated and will be stated within the text.

According to M.A.K. Halliday and Ruquiya Hasan's *Cohesion in English,* 'tie' refers to the relationship between the presupposing and presupposed. These relationships are within-sentence, inter-sentence, and cross-section lexical or structural interdependency. Nevertheless, the perception of cohesion is not only a syntactic but also a semantic one. Cohesive tie "is semantic relation between an element in a text and some other elements that are crucial to the interpretation of it" (p.8).

Halliday and Hasan (1976) define text connectedness in terms of reference, substitution, ellipsis, conjunction, and lexical cohesion. *Cohesion in English* is divided into five major categories of cohesive devices, nineteen subcategories, and many sub-subcategories. These components make the text stay together and play role in discourse.

Writing Quality Assessment

An analytic rubric includes a more detailed analysis, usually based on a scale or checklist of prominent features or characteristics of a piece of writing. The features selected for evaluation are different according to the context of the specific writing assignment, the audience, and the purpose for writing. One of the most prominent analytic rubrics is the ESL Composition Profile, Jacob (1981) (Crusan, 2010).

Methodology

Theoretical Framework

This study was based on taxonomy developed by M.A.K. Halliday and Ruquiya Hasan's cohesion theory (1976) which consisted of two main categories: grammatical cohesion and lexical cohesion. Grammatical cohesion composed of four cohesive ties: reference, substitution, ellipsis, and conjunction, while lexical cohesion covers of two cohesive ties: reiteration and collocation. According to Halliday and Hasan's *Cohesion in English*, cohesion was defined as a semantic concept referring to relations of meaning that exist within a text (Halliday & Hasan, 1976, p.4). Their definition of cohesion focused on the relationship between the meanings of linguistic units. Also, they described a concrete form as a tie. The term "tie" referd to a single instance of cohesion or one occurrence of a pair of cohesively related items. The links were called "cohesive ties" or "cohesive devices."

Participants

The participants in the study were twenty Thai EFL undergraduate students majoring in English, Department of Western Languages, Srinakharinwirot University. They enrolled in *Basic Writing* course in the second semester of the academic year of 2013.

Instrumentation

There were three research instruments to collect the data:

1. The written works were written in English by twenty Thai EFL undergraduate students. Each student wrote one argumentative writing on the given topic.

2. Cohesive features identification form was used to measure the number of cohesive devices in each student's argumentative writing. Each written piece was scanned for cohesive devices by the researcher. Then, they were extracted and counted in order to use for the analysis.

3. Writing quality rubric was used to assess students' writing. Writing criteria used in this study was analytic rubric adapted by Jacobs et el. (1981). The rubric instrument was used correlatively with cohesive devices identification form in order to investigate the correlation between number of devices and writing quality. Two raters who were experienced in teaching English writing for more than ten years employed this analytic rubric for evaluating students' works.

Data analysis

The correlation between the frequency of cohesive devices and the quality of writing were determined by using Pearson correlation.

Findings

Inter-rater Reliability

Table 1
Inter-rater reliability
Mean, Standard deviation, etc.,

Mean	Standard Deviation	Lowest	Highest	Range	Median	Inter-rater correlation
61.90	4.09	53	68	15	62.00	0.98

The present study found that the inter-rater reliability was at $r = 0.98$ which was considered to be acceptable ($r > 0.5$).

Frequency of Cohesive Devices

Table 2
Cohesive devices

Type of Cohesive Devices	Reference devices	Conjunction devices	Lexical devices	Total Number of Cohesive devices
Frequency	627	180	460	1267
Mean	31.35	9.00	23.00	63.35
Percentage	49.49	14.20	36.31	100%

Table 3
Reference devices

Type of Reference Devices	Personal	Demonstrative	Comparative	Total Number of Reference devices
Frequency	358	210	59	627
Mean	17.90	10.50	2.95	31.35
Percentage	57.10	33.49	9.41	100

Table 4
Reference devices
Most frequently used words

Type of Reference Devices	Personal	Demonstrative	Comparative
	You, it, they, I, we, our	The, this, these	Like, more, better, best

Table 5
Conjunction devices

Type of Conjunction devices	Additive	Adversative	Casual	Temporal	Total Number of Conjunction devices
Frequency	89	29	44	18	180
Mean	4.45	1.45	2.20	0.90	9.00
Percentage	49.44	16.11	24.44	10.00	100

Table 6
Conjunction devices
Most frequently used words

Type of Conjunction devices	Additive	Adversative	Casual	Temporal
	And, also, too	But	Because	First of all, second, third, when

Table 7
Lexical devices

Type of Lexical devices	Reiteration	Collocation	Total Number of Lexical devices
Frequency	391	69	460
Mean	19.55	3.45	23.00
Percentage	85.00	15.00	100

Table 8
Lexical devices

Most frequently used words

Type of Lexical devices	Reiteration	Collocation
	Casino, country, money, gambling	In my opinion, make money, waste money, spend money,

Table 9
Correlation between writing quality and cohesive devices

	Writing scores	Reference devices	Conjunction devices	Lexical devices	Cohesive devices
Writing scores	1				
Reference devices	-0.462*	1			
Conjunction devices	0.045	0.173	1		
Lexical devices	-0.203	0.520*	0.358	1	
Total number of cohesive devices	-0.379	0.899**	0.432	0.817**	1

* Correlation is significant at the 0.05 level.
** Correlation is significant at the 0.01 level.

The results reveal there was no direct significant relationship between the total number of cohesive devices and the writing quality (r = -0.379). It can be concluded that some students employing higher number of cohesive devices might not get the higher scores, while the ones employing fewer cohesive ties might get better scores.

Conclusion and Discussion

Conclusion

Regarding the first research question about the frequency of cohesive devices found in the students' written works. Based on the percentage of each cohesive device, it was found that the reference cohesive devices (49.49%) were used the most at the highest percentage, followed by the lexical cohesive devices (36.31%), and the conjunction cohesive devices (14.20%). For the second research question about the statistical mathematics value of the correlation between the writing quality and the number of the cohesive devices, the findings of the present study indicated that there was no significant relationship between the writing quality and the total number of cohesive devices in students' writings. The result suggested that the high number of cohesive devices employed did not result in the high quality of writing.

Discussion

The current study attempted to seek the relationship between the quantity of cohesive devices and the writing quality in paragraph writings written by twenty Thai EFL students. In statistic calculation, the correlation coefficient value between the writing quality and the number of cohesive features of this study was -0.379. The value answered the research question that there was no significant relationship between writing quality and total number

of cohesive ties. The correlation coefficient value of the present study could be interpreted that Thai EFL students employed varied degrees of cohesive ties in their writings. The high use of the cohesive devices did not lead to higher scores. For example, some students might employ higher quantity of cohesive devices but they got lower scores, while students who employed less quantity of cohesive devices got higher scores. The findings in the present study are consistent with those of Alarcon & Morales (2011), Castro (2004), Crossley & Manamara (2010), Johnson (1992), Karasi (1994, Meisuo (2000), Xu (2000), Zhang (2010).

Many researchers have tried to analyze how overall writing quality linked to the quantity of cohesive devices. And they found that the mere analysis of cohesion itself could not evaluate the overall writing quality or lead to the effectiveness of writing. They suggested that coherence was also the important characteristic of writing quality. According to Crossley and Mcnamara (2010), raters highly evaluated coherence to overall holistic scores for the compositions. Their findings indicated that coherence was important element for the judgement of writing quality. Moreover, it was found that cohesive devices were not necessarily defined for coherence. There were many criticisms on Halliday and Hasan's taxonomy of Cohesion in English by several linguists. These researchers concluded that cohesion did not mean coherence. They proved that the existence of cohesive devices did not necessarily lead to successful writing in case that the devices were poorly and wrongly constructed which did not relate to the overall quality of the writing (Alarcon & Morales, 2011; Castro, 2004; Crossley & Manamara, 2010; Hamed, 2014; Johnson, 1992; Karasi, 1994; Meisuo, 2000; Tanawong, 2014; Xu, 2000, Zhang, 2010).

In accordance with those previous studies, the researcher of the present study found that Thai EFL undergraduate students had problems with using cohesive devices in two aspects. Their writing performances reflected that they still attached to Thai language convention when they wrote in English as they attempted to transfer Thai writing to English writing. Also, the students could not distinguish the difference of using each cohesive device which might be because of the incomplete knowledge of cohesive devices acquired from classroom. For instance, the casual ties such as 'because' and 'because of' had different ways to apply. For 'because', it is used to connect two clauses in order to state cause and effect. On the other hand, 'because of' must be followed by noun phrase. Accordingly, the superficial teaching could not support students' understanding about the usage of those particular devices. In sum, most of the participants in the present study tended to misuse and overuse many cohesive devices because of the interference of the mother tongue and the shortage knowledge of using cohesive devices. Consequently, this might be the reason why the relationship between the writing quality and the total number of cohesive features of the present study was not significantly correlated.

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