

Awareness of Discourse Features in Teaching Writing Skills

SHAFIQUE ZAHEER
*MD MOJIBUR RAHMAN
ASMITA SHARMA

Department of Humanities and Social Sciences, Indian Institute of Technology (ISM) Dhanbad,
Dhanbad-826004, Jharkhand, India

*Corresponding author: mrahmanelt@gmail.com; mrahmanelt@iitism.ac.in

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Abstract. Cohesion is deemed an indispensable component of writing, contributing to both the organisation of texts as well as the reader's comprehension of the content. The purpose of this paper is to investigate the utilisation of discourse features in the academic writing of students. It specifically focuses on the cohesive devices employed by students and their level of awareness regarding cohesion and coherence. The research was conducted in the Dhanbad district, with a particular emphasis on technical students studying English for specific purposes. To gain a comprehensive understanding of the topic, this study also reviewed and analysed previous research that explored the usage of cohesive devices and the relationship between cohesion frequency and high-quality writing. This background research provided valuable insights into the existing body of knowledge and helped establish a foundation for the present study. The data analysis demonstrates that students possess the ability to incorporate various cohesive devices into their writing, indicating their awareness of discourse features. However, their usage is somewhat limited due to a restricted repertoire of discourse markers, which affected the range and diversity of cohesive devices employed in their writing. Overall, the paper sheds light on the significance of cohesion in academic writing, emphasising its role in organising texts and facilitating reader comprehension. It highlights the current state of students' awareness and usage of cohesive devices in their writing, providing valuable insights for educators and curriculum developers to enhance students' proficiency in this area.

Keywords and phrases: coherence, cohesion, cohesive devices, discourse markers, writing skills

Introduction

Among the four language skills (listening, speaking, reading and writing, LSRW), writing poses to be the most exigent. According to Richards and Renandya (2002), the challenge lies in generating and organising ideas as well as converting them into comprehensible prose. Cohesion and coherence, two crucial textual components, have long been acknowledged as fundamental characteristics of effective academic writing, according to Halliday and Hasan (1976; 1989). Researchers have recently placed a significant amount of emphasis on the actual writing habits of English as a Foreign Language (EFL)/English as a Second Language (ESL) students as well as the common writing issues they face.

In the realm of linguistics, the concept of “texture” is used to define a text, where a text is seen as a unit of syntax as well as semantics. Halliday and Hasan (1976) identified this feature of texture as being critical to the concept of a text, which is present in all languages. Texture consists of two levels: the sentential level and the textual level. The sentential level is made up of grammatical features of the syntax that represent the deeper semantic structure. This level is further divided into two components, syntactic and semantic. The syntactic component comprises the different types of phrases, clause constructions, passive structures, clausal compounds and word sequence in a sentence, while the semantic component deals with the meaning of the words and how they relate to the overall meaning of the sentence.

The textual level is where cohesion and coherence become functional and manifest themselves. Cohesion is achieved through various means such as reference, substitution, ellipsis, conjunction and lexical relationships. Cohesion creates a link between sentences that helps to build up the overall meaning of the text. Coherence, on the other hand, is established by the reader’s interpretation of the text. Grabe and Kaplan (1996) argue that cohesion and coherence are functional features of the textual level and are the primary stage in the construction of a text. Crossley and McNamara (2012) assert that the lexical decisions made by first language (L1) and second language (L2) writers of English have a substantial impact on their writing. Silva (1993) states that L2 learners employ less cohesive techniques, such as conjunctive and lexical connections. The textual level underlies the surface structure and is crucial to the formation of a cohesive and coherent text.

Previous research has found notable differences between L1 and L2 texts at both micro and macro levels. Specifically, L2 texts tend to have limited vocabulary and grammar compared to L1 texts, as identified in previous studies conducted by Hinkel (2004; 2011). Additionally, the global qualities of L2 texts such as discourse

organisation, reasoning and coherence/cohesion have been found to differ from those of L1 texts, as highlighted by Choi (1988) and Hinkel (2011). It is essential for writers to possess macro-level knowledge and skills, in addition to vocabulary and grammar proficiency, when producing longer texts beyond sentence or clause levels.

Hewings and Hewings (2001, 199) state that “Academic text contains not just propositional information, but also devices with textual and interpersonal purposes”. As per Halliday (1994), the “textual component” of English grammar consists of structural and cohesive techniques. Bloor et al. (2004, 84) note, “Texture is simply the quality of being a text, as opposed to a collection of unconnected language fragments” and Halliday and Hasan (1976, 299) mention that “Cohesion expresses the continuity that exists between one element of the text and the next”. Baba (2009, 191) believes that L2 lexical competency is largely dependent on “semantic networks” and “the capacity to meta-linguistically modify words”.

According to Halliday and Hasan (1976), cohesion is the defining characteristic that sets texts apart from non-texts. This view is also shared by Alarcon and Morales (2011), who describe cohesion as the linguistic elements that contribute to the coherence of a series of sentences; thereby creating a text. Understanding cohesive devices is a crucial component of producing high-quality academic writing and is essential for achieving proficiency in English language academic programmes. As a result, the use of cohesive devices in academic writing has garnered the attention of numerous scholars attempting to solve the problem of the absence of cohesiveness in students’ compositions. The importance of cohesive devices in L2 English writing has been the subject of multiple studies conducted in various countries. In their 2005 study, Liu and Braine (2005) examined the cohesive strategies adopted by Chinese undergraduate students in their argumentative writing. The study revealed their incapability to use cohesive devices in their writings efficiently, which emphasised the importance of additional research in the context of teaching writing. Similarly, Xuefan (2007) conducted a study to investigate how 1st- and 3rd-year students from Wuyi University in China used lexical cohesive devices in their writing. The study found that the student’s proficiency levels did not have an impact on their use of cohesive devices, and repetition was the most frequently employed lexical cohesion. In a similar vein, Yang and Sun (2012) investigated how Chinese EFL undergraduate students of different proficiency levels employ cohesive devices in their argumentative writing. The study indicated that despite differences in their EFL proficiency, the students demonstrated appropriate use of cohesive devices, indicating their ability to effectively use these tools in their writing. Further research has shown that linguistic competency does not always lead to more cohesive texts, as seen in

Crossley and McNamara's (2012) examination of undergraduate Hong Kong high-school students' written essays emphasised that competency did not equate to more cohesive texts, even though the texts were more linguistically competent. Ahmed (2010) in his research of Egyptian student-teachers cohesion problems in EFL essay writing concluded that their non-cohesive writing is a result of low English proficiency. Olateju (2006) investigated how senior-year students in the Nigerian state of Osun used cohesive devices in their writings. Despite years of rigorous English instruction in school, the students were unable to effectively incorporate cohesive devices into their writing. Consequently, scholars from various countries have become interested in exploring the concept of cohesion and coherence in L2 English writing. These studies demonstrate the importance of understanding the concept of cohesion and coherence in L2 English writing and the need for further research in this area.

The present study concentrates on students' awareness of discourse features, i.e., cohesion and coherence in their academic writing. This manuscript investigates the usage of several coherent strategies by first-year technical course students. The research ascertains that students are fairly aware of the various discourse markers and have also used them infrequently though efficiently in their writings. The majority of the writing samples demonstrate a wide use of grammatical and lexical cohesion.

Literature Review

In recent years, scholars have increasingly focused their attention on the challenges faced by EFL/ESL students when composing texts. One of the most researched subfields of L2 writing is the concept of cohesion and coherence. Multiple studies on cohesion and coherence in EFL/ESL writing has been conducted through the application of Halliday and Hasan's (1976) framework. However, the findings of these investigations have been inconsistent, with some researchers reaching similar conclusions, while others have found conflicting results. Some studies have shown that the use of cohesive devices in effective and ineffective writing is the same (Johnson 1992; Zhang 2000), while others have found that highly rated essays use cohesive devices differently than poorly evaluated ones (Jafarpur, 1991). Additionally, it has been observed that higher-scoring essays exhibit greater cohesiveness and contain more lexical collocations compared to lower-scoring essays (Johns 1980; Zhang 2000). It has also been noted that lexical cohesiveness, conjunctions and references are the most frequent categories found in both high and low-scoring essays.

In the realm of L2 writing, the appropriate use of cohesive devices is essential to the development of coherent texts. The incorrect or insufficient use of cohesive devices can result in texts that lack clarity and coherence, which in turn can impact the effectiveness of communication. Olateju (2006) noted that such difficulties could arise due to a lack of sufficient exposure to English, which in turn could affect learners' ability to use cohesive devices effectively, and as a result, adversely affect the coherence of the text. Moreover, Irwin (1982) found that the use of a greater number of cohesive devices in writing can improve readers' comprehension. This underscores the importance of coherence in the overall quality of written communication. While cohesion and coherence are closely related, they are often viewed as distinct entities that are challenging to define separately. Cohesion refers to the way that written texts are connected through various linguistic devices, such as conjunctions, pronouns and lexical repetition. Coherence, on the other hand, refers to the overall sense that a text makes and how well its elements are organised to achieve a particular communicative goal.

Coherence is considered to be a subjective and abstract concept that is difficult to teach and learn (Crewe 1990; Lee 2002). Since it is influenced by numerous factors, such as the writer's purpose, the target audience, and the rhetorical context of the text. As a result, it can be difficult to identify and teach specific strategies for developing coherence in writing. However, despite the challenges in defining and teaching coherence, it is widely recognised as a crucial element in effective writing, particularly in academic and professional contexts. As noted by Grabe and Kaplan (1996), coherence pertains to the internal aspects of a text, which encompasses elements such as cohesion and register. Mastery of these elements can lead to more effective communication and better writing outcomes.

Effective communication relies on establishing relationships between elements within a text. These relationships are established through various grammatical and lexical cohesive devices such as reference, substitution, ellipsis and conjunction. The use of these cohesive devices enables speakers and writers to convey the meaning that is interpreted by their audience. The two forms of cohesive devices, grammar and lexicon, provide semantic relations for the interpretation of semantic units. In essence, cohesion highlights how meaning-based relationships are established through explicit lexical and syntactic features known as cohesive devices, which signal relationships between sentences and paragraphs.

Halliday and Hasan (1976) introduced five types of cohesion devices (CDs) as a reference for analysing and evaluating the cohesion and coherence of writing:

1. Reference
2. Substitution
3. Ellipsis
4. Conjunction
5. Lexical cohesion.

However, Carrell (1982) and Johns (1986), who advocated the significance of readers' background information, challenged Halliday and Hasan's (1976) cohesive theory. Carrell (1982, 482) asserted that, based on schema theory, "processing a text is an interactive process between the text and the prior background knowledge or memory schemata of the listener or reader". In other words, both the structure and content of the text as well as the reader's interaction with the text must be considered. Carrell (1982) thoroughly examined three empirical investigations to validate his critique of the cohesive view of coherence. He ultimately concluded that there is no significant correlation between the number of cohesive devices and coherence.

Awareness of discourse features in L2 writing

The use of cohesive devices is essential to creating effective written communication as several studies have examined the relationship between cohesive devices and writing quality among ESL students. For instance, Karasi (1994) examined the use of cohesive devices in expository essays written by secondary school students in Singapore and found no difference in usage between native and non-native students. In another study, Intaraprawat and Steffensen (1995) analysed the discourse markers (DMs) used by ESL university students in persuasive writing and found that well-scored essays had a higher density of DMs, which contributed to greater cohesion. By contrast, poorly rated essays had a lower density of DMs. Steffensen and Cheng's (1996) study investigated the impact of direct instruction on DMs in argumentative texts produced by students. The study employed a process-based approach that emphasised the pragmatic uses of DMs. The results showed that students who received direct education on DMs utilised them more effectively and demonstrated greater sensitivity to readers' demands, leading to significant improvements in their writing abilities.

Jalilifar (2008) analysed the descriptive compositions of Iranian EFL students and identified the frequency of different types of markers. The study found that elaborative markers were the most commonly used, followed by inferential,

contrastive and causal markers. Interestingly, topic-related markers were used the least frequently. The study also revealed a positive correlation between the composition quality and the number of markers employed by the students. Similarly, al-Jarf's (2001) study examined how Arab EFL students used coherent devices. The study identified substitution as the most difficult type of cohesion, succeeded by reference and ellipsis. The findings indicated that cohesion errors were the result of insufficient linguistic competence, particularly in terms of syntactic and semantic comprehension, as well as limited familiarity with cohesion regulations.

Likewise, Lee's (2002) study provides insights into the use of cohesive devices in the writings of Chinese students, where lexical devices were the most commonly utilised form of cohesion, and conjunctions and reference devices were used with lower frequency. This highlights the potential lack of proficiency in Chinese students' usage of conjunctions and reference devices, which can lead to ambiguous and less coherent writing. Additionally, the study identified the inappropriate use of certain cohesive devices, such as the overuse and misuse of conjunctions, and the restricted use of lexical cohesion, which can hinder the overall coherence of the text. Zhang (2000) further emphasises the significance of cohesive devices in his study, as raters primarily relied on cohesiveness to evaluate the overall quality of essays in evaluating L2 writing samples. The study's findings suggest that cohesive devices play a crucial role in producing cohesive and coherent texts, and their proper usage is essential for effective communication, highlighting the importance of teaching students the proper usage of cohesive devices.

Furthermore, Olateju (2006) and Wu (2006) in their respective study emphasise the importance of teaching cohesive devices to foreign language learners. Olateju's research found that ESL learners lacked proficiency in their use of cohesive devices in written texts, leading to poorly structured and incoherent writing. Similarly, Wu's study challenges the belief that foreign language learners frequently employ substitution and ellipsis as cohesive devices in their spoken performance and found that proper usage of cohesive devices in spoken communication can improve coherence and effectiveness. Therefore, it is essential to teach foreign language learners the proper usage of cohesive devices to improve the clarity and coherence of their writing and speech.

Expanding upon prior studies, Allard and Ulatowska (1991) evaluated the writings of 30 native English fifth graders and discovered a strong correlation between the number of lexical ties and the quality of the writing. The study employed both narrative and procedural texts, demonstrating that while cohesive devices were significantly associated with writing quality in narratives; this was not observed

in procedural texts. Additionally, it was noted that the use of cohesive devices and writing quality were closely related and that cohesive qualities varied significantly across discourse genres.

Zhang (2000) further explored the use of cohesive devices in the expository compositions of Chinese undergraduates. The study found that students employed a variety of cohesive devices, with lexical devices being the most commonly used, followed by conjunctions and reference devices. However, the study did not find a numerically significant correlation between the quantity of cohesive devices and the quality of writing. The study also identified several issues in the writing practices of Chinese undergraduate students, such as the overuse and misuse of conjunctions and the limited use of lexical coherence.

In contrast, Liu and Braine (2005) conducted a correlational study to explore the correlation between the number of cohesive devices used and writing quality in argumentative compositions written by Chinese undergraduate EFL learners. The research demonstrated that conjunction devices such as additive, causal, temporal and adversative were employed with descending frequency and among the three primary categories of cohesive devices; lexical devices had the strongest correlation with composition scores. The results indicated a significant relationship between the quantity of cohesive devices and the quality of writing, suggesting that the effective use of cohesive devices, particularly lexical devices, is critical for improving writing quality in Chinese undergraduate EFL learners.

In addition, Johnson (1992) investigated coherence in compositions written in Malay and English by both native and non-native speakers. The study found no significant difference in coherence between strong and poor Malay compositions, as well as between compositions scripted in English by native and Malay speakers. However, the results revealed that L2 learners tend to use fewer DMs than native speakers. Overall, these studies provide insights into the use of cohesive devices in student writing. The findings suggest that while students employ a variety of cohesive devices, their overuse or misuse can negatively impact writing quality. The effective use of cohesive devices, particularly lexical devices, can significantly enhance writing quality, underscoring the importance of explicit instruction and practice in the use of cohesive devices in language curricula. These studies also suggest that while there may not be a significant difference in coherence between strong and poor compositions, the use of DMs by L2 learners may impact their ability to create more coherent texts. They also highlight the importance of explicit instruction and practice in the use of DMs to improve coherence in L2 writing.

Use of cohesive devices in L1 and L2 writing

Khalil (1989) observed that Arab students tend to rely excessively on the repetition of lexical words as a means of creating cohesion in their writing, while other lexical and grammatical cohesion devices are underutilised. Crewe (1990) identified two issues with the writing of Hong Kong college students: the use of several connectives without recognising the semantic differences between them and the overuse of connectives. Wikborg (1990) found that Swedish students often exhibited cohesion issues in their writing, ranging from missing or misleading sentence links to the excessive distance between cohesive items in a cohesive chain to erroneous use of cohesion devices.

In a comparative study conducted by Field and Yip (1992), the argumentative writing of 67 Hong Kong students with that of 29 Australian students was analysed in English. The study revealed that the Hong Kong students utilised a greater number of conjunctions, particularly at the sentence beginnings, compared to their Australian counterparts. Additionally, the repetition of the same lexical item as a cohesive device is also common in the papers of Spanish-speaking students, while other lexical and grammatical cohesion devices are scarce (Palmer, 1999). Dueraman's (2007) study of cohesion and coherence in narrative essays written in English by Malaysian and Thai medical students revealed that both groups employed more syntactic than semantic ties (reiteration and collocation).

Using frequency counts, Hu, Brown and Brown (1982) compared the use of cohesive devices by Chinese and Australian university students and found that the Chinese used more conjunctions, while the Australians engaged more lexical cohesiveness. Hays (1992) investigated the use of DMs by Japanese language learners and found that "but", "and" and "so" were frequently employed. Overall, these studies highlight the different ways in which students from different linguistic and cultural backgrounds employ cohesion devices in their writing, and the potential challenges they may face in creating cohesive and coherent texts.

Methodology of the Study

The methodology used for this study is quantitative. The purpose of this study is to observe students' awareness of discourse features in their academic writing. The research aims at discovering the use of various cohesive devices in students writing. A quantitative research approach was employed, involving a sampling process, survey and questionnaire administration, data collection and subsequent data analysis of the participants.

Setting and participants

The study was conducted during the span of one academic session and the study population consisted of 95 1st year technical (B. Tech) students at the Indian Institute of Technology (Indian School of Mines), Dhanbad, India. The selection of the participants was done using a simple random sampling procedure. The study was done in the purlieu of Dhanbad district, Jharkhand, India.

Instruments

The researcher carefully chose an expository essay topic, which could help bring out the cohesive elements in the students' texts. The topic chosen was "global warming" as a classroom activity to elicit the right response. The topic served as a stimulant to enhance the students' perception of the concerns associated with the topic, as well as basic cues in the areas of content, syntax and coherent techniques in the writing task. A single essay was selected to assure uniformity and facilitate data comparability.

Procedures

The study can be segmented into two distinct phases: the initial data collection phase, which involves gathering information from participating students, and the subsequent data analysis phase, which entails the methods and procedures used to analyse the data collected. The researchers studied and evaluated the essays to ensure the use of discourse features, and determine their awareness among student writers. The cohesive devices were identified in each text with their number of occurrences and written in columns.

Results and Discussion

A tabular representation of the cohesive devices used by the students has been organised. The table is categorised into two broad cohesive aspects: lexical and grammatical (as shown in Table 1). The sub-elements under lexical cohesion include repetition, synonyms, antonyms and collocation, while those under grammatical cohesion include references, ellipses, conjunctions and substitutions.

Table 1. Frequency of occurrence and usage percentage of the cohesive devices

Cohesion	Sub-types	Frequency of errors	% of use
Grammatical	References	239	21.11
	Ellipses	10	0.88
	Conjunctions	565	49.91
	Substitutions	8	0.71
	Total	822	72.60
Lexical	Repetitions	178	15.72
	Synonyms	60	5.30
	Antonyms	27	2.39
	Collocation	45	3.98
	Sub-total	310	27.40
	Total	1,132	100.00

The research ascertains that students are fairly aware of the various DMs and have also used them efficiently though infrequently in their writings. A total of 1,132 cohesive devices were used by the students, where lexical cohesion was used 310 times and grammatical cohesion was used 822 times, that is 27.4% and 72.6%, respectively. Most of the writing samples demonstrate a wide use of grammatical and lexical cohesion. Repetitions, references and conjunctions are the most used DMs whereas collocation, ellipses and substitutions were the least. Conjunctions were the most frequently used cohesive device by the students 565 times to be exact 50%. After it, references and repetitions were used commonly in the writing samples 239 and 178 times, respectively. The least used cohesive device is substitution and ellipses with a minimum use of 8 and 10 times respectively which accounts for a negligible 1% usage. The uses of collocations, synonyms and antonyms have also been observed in students' writings. Though these elements of cohesion were used efficiently, their uses were limited to some samples only (as shown in Figure 1).

A significant aspect of the data analysis infers that students prefer using grammatical cohesion more frequently than lexical cohesion almost thrice as much. Of the total number of cohesive devices used, grammatical cohesion constitutes 72.6% whereas the use of lexical cohesion amounts to only 27.4% of the total 1,132 DMs used. On average each student used cohesive devices 12 times.

Use of Different Discourse Markers

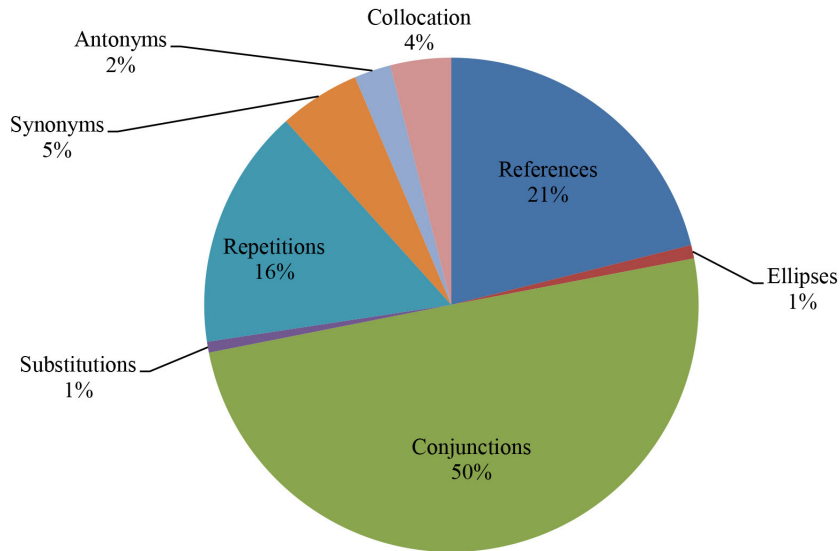


Figure 1. Usage of DMs

The grammatical cohesion is based on structural content and is driven by logical and structural rules that govern the arrangement of clauses, phrases and words in a text. Lexical cohesion on the other hand concentrates on the language content and background knowledge. It involves the choice of vocabulary and the way it links to parts of the text. Where grammatical cohesion is focused on accuracy, lexical cohesion is concerned with the relationship that exists between combinations of terms between sentences. As cohesion is expressed partly through vocabulary and partly through grammar, to ensure a cohesive text, both grammatical and lexical ties should be present within a text to hold it together and give it meaning. However, teaching methodologies and techniques have always prioritised grammar-based teaching-learning methods, and this inbuilt constant urge to be grammatically accurate leads to students using grammatical cohesion more frequently. Students are generally inclined towards maintaining grammaticality, that is, to produce grammatically accurate sentences they limit their use of DMs to a few common ones, as a result accuracy surpasses fluency and fluidity in writing is compromised to some extent.

Another major inference is that students prefer using a limited variety of cohesive devices in their writing repeatedly. The primary reason is that their repertoire of cohesive markers is inadequate and therefore their use is rather constrained. They tend to use only those cohesive markers which they are confident about and have

been using frequently to avoid grammatical and lexical mistakes. They are generally reluctant in using unfamiliar and uncommon ones to avoid unnecessary lapses in writing. Their writings seemed too constrained and lacked fluidity, restricted use of cohesive markers resulted in absence of free-flowing thoughts in writing.

Additionally, when students convert their thoughts, which are often constructed in their mother tongue to L2 writing, the essence of it concedes. Lack of proper knowledge and usage of DMs hampers smooth transition of ideas and thoughts in L1 to L2 writing.

Grammatical cohesion

Conjunctions

The students made use of a variety of conjunctions in their writing, as conjunctions alone constitute up to 50% of the total cohesive devices used in their writings. They made use of both, the coordinating as well as the subordinating conjunctions, with “and” and “but” being the most used coordinating conjunctions. Whereas “because” and “if” were the most commonly used subordinating conjunctions. Other conjunctions used included “after”, “before”, “till”, “unless”, “that”, “although”, “as” and “while”.

Example 1:

- a. ...because in thermal power generating station.
- b. But due to global warming it sounds as if the whole earth would be flooded.

Students tend to prefer using certain cohesive conjunctions more frequently than others. Various cohesive devices are used in different situations; to mark sequence, conclusion, correlation, coordination and so on but students fail to use these in their appropriate setting and instead keep using a set of cohesive items repeatedly in all situations. The rationale being lack of awareness of these cohesive items or lack of practice, that is, students just have the knowledge of these devices but fail to use them in suitable situations. This also leads to another noticeable flaw in the current teaching, teachers tend to teach the basic sentence structures with related grammatical aspects and rules, without properly making students understand the correct application of them. Lack of proper practice and authentic implications can also lead to such student behaviour.

References

After conjunctions, references were the second most used cohesive marker. It was used 239 times exactly amounting to 21% of the total. “It” was the most frequently used referential cohesive device. Apart from it, “they” and “that” were also used. Students used only one type of reference in their written text, that is, anaphoric, whereas not single evidence of using cataphoric references was present. Nevertheless, students tend to repeat words and phrases rather than using references.

Example 2:

The greenhouse is made of glass and glass has a very unique property. It allows the sun rays to pass through it but it won't allow it to escape as a result the whole greenhouse becomes heated.

In the excerpt, “it” is used as a referential cohesive repeatedly whereas the word “glass” is also used a repetition instead of a reference.

Ellipses and substitutions

Ellipses and substitutions were the least used cohesive devices. Ellipses show a negligible 1.2% usage whereas the use of substitution is < 1. Students rarely utilised them in their writing. However, the most commonly used ellipses were “one”.

Example 3:

Both the causes of global warming, including this one contribute to the depletion of the ozone layer.

Lexical cohesion

Repetitions

As most Indian languages (mother tongue or L1 of the students) prefer emphasis and repetition is one of the most common and widely used devices for this purpose. Therefore, students are more comfortable repeating words instead of using referential cohesive to garner more emphasis. This is an inherent and subconscious practice influenced by students' mother tongue. Many instances of repetitions have been recorded in different parts of speech that were commonly found in all

the sample texts. Repetition of nouns, adjectives, main verbs and helping verbs were the most prevalent ones.

Example 4:

- a. Planting more and more and more trees... (Repetition of the adjective “more”)
- b. In which the infra-red radiation re-emitted and re-emitted by the greenhouse gases... (Repetition of the verb “re-emitted”)
- c. Moving from one reason to other reason of global warming... (Repetition of noun “reason”)
- d. People don’t plant more trees, don’t reduce the use of coal and petrol, don’t make use of public transport... (Repetition of auxiliary verb “don’t”)

Collocation

An interesting and surprising element noticed in most of the students’ writings was the use of collocations, though infrequently but used efficiently. Some of the collocations used were environmental degradation, disposal of industrial waste, waste treatment systems, discharge chemical waste, emission of greenhouse gases, eco-friendly, contamination of land/water, renewable energy, environmental protection, melting icecaps, long-term consequences, fossil fuels, deplete natural resources, sustainable development, toxic waste and climate change.

Synonyms and antonyms

It was observed that synonyms and antonyms were used occasionally in students’ writings. “Harmful”, “contaminated”, “lethal” and “deadly” were used as synonym variants for “toxic”. Similarly, “reduce” and “exhaust” were used for “deplete”. The majority of the students did not employ the use of antonyms as much. They preferred negating the word/expression by prefixing the word with “not” instead, like “not harmful” instead of “harmless”. However, some samples used antonyms like “artificial” (natural), “waste” (save) and also near antonyms.

Example 5:

Many people consider using various electronic devices not harmful, but in the long run... (Using negation instead of antonym)

Near synonyms or antonyms *are more common than perfect synonyms*. Students' limited repertoire of vocabulary is largely responsible for their lack of using different variants of discourse markers. Engineering students often neglect English writing and compulsory English studies is considered as an additional subject only to secure passing grades. They usually mistake it as a mere subject in their curriculum and seldom consider English writing as an essential language skill. Although the English syllabus in a technical course is needs based and includes all language skills, LSRW, students do not realise its importance.

Pedagogical Implications

Based on the findings and results illustrated above, the present study construes certain pedagogical implications for both teachers and ESL learners. Firstly, teachers should assist students in expanding their vocabulary since the findings indicated that participants preferred to repeat terms rather than use their synonyms or antonyms to explain the important aspects of their topic. Teachers could engage the students in various pre-writing activities and indulge them in some vocabulary-building exercises such as word-association games as a pre-writing activity to stimulate and enhance students' vocabulary.

Secondly, students tend to make use of only a set and limited number of cohesive devices. To expand their repertoire, teachers need to guide and teach them in the right direction, employing effective teaching techniques and practices. Teachers should concentrate on providing emphasis on cohesion and organisation rather than correctness and form. A discourse-based approach to teaching writing should be employed.

Thirdly, students did not utilise a variety of cohesive devices and they overused certain elaborative marks, using them more frequently than other markers. Its overuse is clearly a sign of weakness and limitation on the part of these learners in their writings. This suggests that teachers can work on incorporating the use of a variety of discourse markers in their classroom teaching practices. Moreover, teachers must increase their students' awareness of textual standards of practice and educate them on the incorporation of particular cohesive items and their occurrence in particular forms of writing. As a result, the students will certainly be able to compose texts with a variety of purposes and structures and also gain comprehensive understanding of the types of DMs to be used following the situation, text type and context when writing in English.

Fourthly, the paucity of a correlation between writing style and the use of cohesive devices in ESL learners' writings connotes that it lacks appropriacy

and purposefulness. Teachers should therefore emphasize both, the quantity and quality of CDs rather than just one of them. It is necessary to increase the learners' knowledge of how various categories of cohesive devices should be used and their importance in creating a coherent text. Learners should be perceptive to the fact that both appropriate uses of discourse markers along with staunch background knowledge construct a coherent text.

Fifthly, adequate use of lexical cohesion should be emphasized in ESL classrooms. The use of synonyms, antonyms and lexical sets in English writing should be accentuated to develop more cohesive and coherent texts. Additional importance should be given to the use of extensive and assorted vocabulary knowledge.

Lastly, to enhance students' awareness of coherence and cohesion in writing, reading must be incorporated into writing lessons (Heller, 1999; Hirvela, 2004). Through the reading-to-write process, students can learn grammatical competence, sentence structures, genre features and vocabulary. Observing the usage of cohesion devices elevates learners' awareness and exposes them to excellent English writing.

Conclusion

The study confirms that although students are aware of the discourse features, they tend to overuse certain elements, such as conjunctions, repetition and reference, while neglecting or omitting other devices completely. Students are observed to under-utilise several cohesive devices, even in the use of conjunctions which is the most commonly used cohesive device in their writing they tend to use only some conjunctions frequently. Students typically use only a limited variety of the many cohesive devices present. This limited use of cohesive devices may be attributed to a lack of competence in using discourse markers and a restricted vocabulary repertoire despite having several years of exposure to English reading and writing texts.

Based on of the findings, it may be determined that certain cohesive devices were preferred for a variety of reasons. This dynamism in the use of cohesive may be attributable to the type of data collection process, as some cohesive devices are included in the conversational data of oral performance. We tend to overuse certain cohesive items and conjunctions in our normal day-to-day speech, and as a result, our writings also get influenced by our speech. Another aspect could be the limited amount of knowledge and discourse required to use such structures. Furthermore, language learners' inability to apply syntactic and lexical tools to generate competent written text, as suggested by Hinkel (2008), may also be related to this issue.

It also brings to light that students tend to use grammatical cohesion more frequently than lexical cohesion, about twice as much. Texts may exhibit strong or weak cohesion, but there will be no text that does not manifest cohesion. Similarly, the research shows that few of the students' writing samples showed strong cohesion but most of them were weakly cohesive. Nevertheless, each text showed some elements of cohesion, therefore, students need to concentrate on lexical elements as well to write better essays with strong cohesion.

Furthermore, the students, mainly focus on word and sentence level cohesion, ignoring the relations of meaning that exist within the text. An overtly cohesive and coherent text calls for ties in between sentences, that is, the relationships within a paragraph as well as between paragraphs. This association is rendered possible by the meaning relationships that occur both within and between sentences and phrases. This propensity results in an absence of interconnectedness, which helps readers to follow the flow of thought in a relevant, useful and understandable manner. As it demonstrates how lexical and syntactic characteristics establish meaning connections, cohesion gives a series of sentences a coherent texture. Students thus need to include coherence as well as cohesion in their thinking and writing as well.

Results indicated that language learners are inclined to use pronominal more often than other cohesive devices for creating coherence and organisation across the sentences. This could have emerged from a dearth of English language proficiency, particularly since EFL/ESL students might lack the necessary knowledge to comprehend what makes a meaningful English text. This could be the result of ignorance, lack of awareness or limited exposure, which in turn leads to a lack of understanding of how language users connect sentences in a text to establish textuality. Thus, it can be deduced that students lack competence in creating linguistically coherent writing to produce meaningful texts that effectively, correctly and cogently communicate information.

These difficulties can also be due to inappropriate teaching practices, that is, how linguistic knowledge of the language has been provided so far. Teachers with limited expertise in discourse-based teaching and experience in teaching cohesion and coherence, or teachers focusing more on textual knowledge rather than practical implications can also be valid reasons. As far as language acquisition is concerned, it was underlined that not only the inclusion and frequency of occurrences is important but also studying the corpus as a whole and analysing conversation to identify both the frequency of forms and how it illustrates the evolution of language function is equally beneficial. This entails the transition from a product-oriented to a process-oriented perspective on L2 acquisition.

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