A Study on Testing the Proficiency of Discourse Knowledge in Engineering College Students in Coimbatore, Tamilnadu, India

P. Mangayarkarasi, M.A., M.Phil., M.Ed.

Abstract

The different aspects of discourse are Structure, Meaning, Style, Function and Situation. The focus of this questionnaire is to investigate the proficiency level of the respondents in the area of discourse knowledge with special reference to Structure. Knowledge about discourse may be structural, conceptual and functional. Structural knowledge about discourse incorporates knowledge about words, sentences and their organization. While imparting writing skills, teaching grammar related to the sentence level alone is not sufficient. Writing requires both grammatical competence and discourse competence. Since English is multifaceted, awareness should be created among L2 learners about micro-level and macro-level aspects of discourse: syntax and semantics on a sentential level, cohesion and coherence on a textual level and so on.

Key Words: Discourse Knowledge, Aspects of discourse, Structure, writing skills, Cohesion.
Introduction

Students writing in second language are acquainted with social and cognitive challenges that are related to second language acquisition. Writing skills must be acquired through experience. Enough practice can help students acquire proficiency in the use of the language as well as writing strategies, techniques and skills. Writing also involves composing, which implies the ability either to tell or retell pieces of information in new texts, as in expository or argumentative writing. Perhaps it is best viewed as a continuum of activities that range from the more mechanical or formal aspects of ‘writing down’ on the one end, to the more complex act of composing on the other end. (Omaggio Hadley, 1993).

One of the important advances made in the cognitive theory of discourse processing has been the recognition of the fundamental role of knowledge in production and comprehension. Whether at the level of words or sentences or at the level of whole discourses, language users need vast amount of knowledge in order to be able to produce or understand meaningful text and talk.

Scholars like (Cumming 2006), Ferres (1999), Hyland (2003), and Kepner (1991) insist that in L2 context, the ability to construct meaning in discourse and the fluent expression of ideas are the most important aspects of English writing that should be developed right from the beginning. Despite years of language education in schools, second language learners have deficiency in specialized knowledge about discourse, (pragmatic) meaning of words (semantic) and knowledge about word order and other grammatical phenomena. The knowledge about the various levels or dimensions of language including discourse, which is supposed to be coming under structural or grammatical knowledge, is important for engineering students to fair well in their technical writing. Researchers like as Hasan and Halliday provide an exhaustive list of cohesive elements that make the text more cohesive and understandable. But students fail to use complex grammatical cohesive devices efficiently because of lesser awareness and exposure.
Cohesion

Cohesion is a semantic property of a text (i.e.) used to link sentences of a text together semantically. “Cohesion refers to the range of possibilities that exist for linking something with what has gone before, since this linking is achieved through relations in meaning” (Halliday and Hasan 1976:10). Cohesion refers to the grammatical and/or lexical relationships between the different elements of a text, and the relationship may be between different sentences or between different parts of a sentence (Richards, Platt & Platt, 1992). Kilfoil and Van der Walt (1997) define cohesion as the linking of sentences and paragraphs to form a meaningful text, and not a mere collection of unrelated sentences.

Discourse Knowledge Testing

To examine the proficiency level of the Engineering students’ written technical discourse, a test was conducted making use of a questionnaire. For the construction of discourse, knowledge about i) the grammatical nature of sentences ii) construction of sentences of one grammatical forms into another and iii) linking of such grammatical forms of sentences in a unified way etc are required. Hence sentences and manipulation of the sentence forms are required for the construction of discourses.

- In order to test the knowledge about sentence and sentence conversion which is required for discourse comprehension and production, 4 tests of sentence conversion were administered to the students. They are:
  1. Conversion of the voice of sentences.
  2. Conversion of modality (positive, negative) of sentences.
  3. Combining the sentences using appropriate linking devices.
  4. Reorganizing sentences in appropriate structural forms.

Sentence Level

Sentence conversion: (Active to passive)
The sentences and sentence patterns used in technical writing are absolutely different from those found in a literary text. Actually, technical writings are meant for exposing scientific analysis, enunciation of theories/ data, experiment, etc. Technical writing is objective and this objectivity enables the deciphering of information quickly and precisely. Use of sentences in passive voice makes the text objective and impersonal. Impersonal passive structure is found to be predominant in technical writing. The omission of the ‘by’ agent in the passive voice sustains the impersonal passive structure. In order to emphasize the role of passive and agentless passive construction in science texts and to create awareness about the function of passives, a test was conducted to assess whether students are capable of converting active sentences into appropriate passive forms.

[The first question in Questionnaire–I was meant for this sentence conversion.] It consisted of 10 active voice sentences to be converted into impersonal passives. Through this test, the knowledge level of the students in converting active voice into passive voice was tested. In the conversion of active voice into passive voice, the ‘subject’ and ‘object’ are permuted, the verb pattern changes into passive structure, and permuted subject gets the agentive marker ‘by’. For example, the active sentence, ‘We examined the mixture under a microscope’, when converted into passive undergoes the following changes. The subject, ‘we’ and object ‘the mixture’ are permuted, the verb ‘examined’ is converted into ‘was examined’ and ‘by’ is added with the permuted subject. Usually in the impersonal passive structure the ‘by’ agent is omitted and ‘the doer’ is not evidently shown. Thus the passive form “the mixture was examined (by us) under the microscope” is obtained.

In the analysis it was found that, 24% of respondents had successfully converted more than 5 active sentences, 44% had converted less than 5 sentences and 32% had given incorrect converted forms. This test exhibited errors in all the three steps of conversion of voice namely, interchanging the subject and object, changing the verb pattern without changing the tense and omission of ‘by’ agent to impersonalize the sentence. These errors reflect that the students are not up to the mark in voice conversion practice and in general deficient in their grammatical competence. Since knowledge about the grammar of sentences is a prerequisite for production
of grammatical discourse, training is required to be given to students about the grammar of sentences.

**Affirmative to Negative**

[The second question in questionnaire- I] is again focused on sentence conversion but from affirmative to negative. Totally 15 sentences were given for conversion. Through the analysis of the data, it was found that only 20% had succeeded in converting more than 8 sentences and 44% had succeeded in converting less than 8 sentences and 36% had not given any answer. It is true that the negative sentences are harder to process than affirmative ones.

Affirmative sentences can be turned into negatives without altering the sense by following certain processes. One process involves putting a negative prefix or a word having the opposite meaning after a negative word. For example, “God will remember the cry of the poor”, according to the above said process, it will be converted into “God will not forget the cry of the poor”. But the respondents had given their answer as “God will not remember the cry of the poor”, “God will forget the cry of the poor”.

Some affirmative sentences should be changed by substituting certain words. For example “As soon as the thief saw the police, he ran away” is converted into negative by substituting ‘No sooner---than’ for ‘as soon as’. The resulting sentence is “No sooner did the thief see the police, than he ran away”. Since respondents were not exposed to this type of conversion, they had written sentences like, “The thief saw the police but he didn’t run away”. Also they were not more familiar with the use of the word’ but’ to change from affirmative to negative as in the conversion of the sentence “Only a fool would act like that” into “None but a fool would act like that”. The respondents had given the answer as “No fool would act like that”.

Another method of conversion involves removing ‘too----to’ in a given sentence and using instead the phrase so---- that’. For example,” His writing is too bad to be read”, can be changed as “His writing is so bad that it cannot be read”. The respondents had given the answer as “His writing is so good to read”.

Language in India www.languageinindia.com
12 : 9 September 2012
P. Mangayarkarasi, M.A., M.Phil., M.Ed.
A Study on Testing the Proficiency of Discourse Knowledge in Engineering College Students in Coimbatore, Tamilnadu, India
Combining Sentences

Although the primary goal of second language teaching was to develop the students’ discourse proficiency enabling the production and comprehension of English texts of varying length and complexity it was also important to improve their ability in the production of sentences in isolation and in combination. The rationale for addressing sentence skills is to introduce the students to the subtleties of sentence formation and combination that enables them to achieve focus, clarity at every level of writing. Thus sentences though introduced for practice in isolation, students should be aware of the role as constructing elements of clear and effective paragraphs. The students are to be exposed not only to common sentence formation processes but also sentence combining processes for creating discourses and the problems related to the choice of sentence fragments, key words, appropriate cohesive devices, etc.

[In the third question of Questionnaire I], 5 sentences were given to check whether the respondents have knowledge in linking ideas and thereby utterances using appropriate discourse markers. They were also provided instruction to use the connectives or markers of purpose and function, time sequence, etc. Even though they were instructed about the type of cohesion markers they had to use, only 17% had linked all the sentences correctly. 17% had given wrong answers. Remaining 66% had linked less than 4 sentences. Majority of the students had made mistakes in combining sentences making use of markers representing ‘temporal’ and ‘contrast’ relationship.

Sample Answers

1. George likes to read science fiction. Paul likes to read poetry. (Students were supposed to use markers representing contrast). They had answered it by using ‘and’.

“George likes to read science fiction and Paul likes to read poetry”.

Language in India www.languageinindia.com
12 : 9 September 2012
P. Mangayarkarasi, M.A., M.Phil., M.Ed.
A Study on Testing the Proficiency of Discourse Knowledge in Engineering College Students in Coimbatore, Tamilnadu, India
2. Finish your assignment. Come to the class. (They had to use temporal markers to link sentences). Instead of using the marker representing temporal connectors, they had written with conditional marker as “If you finish your assignment, come to the class.

i) Sentence Given: Finish your assignment. Come to the class

ii) Expected Answer: Finish your assignment then Come to the class

iii) Given Answer: If you finish your assignment, come to the class.

3. He does not like to write. He enjoys reading. (They had to answer by using a marker representing contrast). They had written with the marker representing causal relationship “As he enjoys reading, he doesn’t like to write.

The aim of testing was to find out the extent of the use of cohesive devices, the type of cohesive devices that are widely used and to see whether they are appropriate or not. Explanation is also provided as to why some cohesive devices are used and why they are inappropriate. The responses show that the use of ‘but’ to express contrast was the predominant, because it was easy for them to use without searching for other markers such as ‘in fact’, ‘although’, ‘in spite of’ and ‘where as’ which also in a way reflect the function of contrast but are less frequent in the respondents use. Students use the marker ‘in contrast’ very often instead of the other adversative cohesive devices. The results also show the extended use of markers ‘because’ and ‘so’ respectively. It seems that students prefer to use one device which was ‘because’ to express causality and the use of ‘so’ to express the results. Hence the other causal cohesive devices are not found in their writing.

Students seemed to have problem in using, cohesive devices particularly those representing cause. We come to a conclusion that students have difficulty in using grammatical cohesive devices. Thus the more grammatical cohesive devices are used, the more they are inappropriate and when the less grammatical cohesive devices are used, the less they are inappropriate. The research was conducted to gain more insights in the use of cohesive devices in general and grammatical cohesive devices in particular and to focus on the use of grammatical cohesive devices to strengthen students’ writing from discourse point of view. The conclusion
we draw from this question is that when students use appropriate devices, they will achieve cohesive discourse; however, the overuse of some grammatical cohesive devices and use of inappropriate devices make the discourse unacceptable.

**Rearranging Sentences**

Proper sequencing of concepts and utterances make the discourse coherent. Writing techniques and strategies with importance given to conceptual organization help students to develop both cognitive and rhetorical abilities of English discourse. Writing practice with coherence under focus enables students to perceive the communicative purpose in their writing rather than seeing the writing exercises as isolated pedagogical tasks. Through text sequencing practice, students can involve in a series of smaller writing assignments, gradually move to build more complex ones. Furthermore, the recursive nature of sequencing encourages students to return again and again to bolster and build upon earlier skills so as to achieve perfection. For enhancing the discourse organization and sequencing skills, the students will have to be provided with information and arguments and the knowledge for organizing information. In text construction activities, students are encouraged to show their knowledge of combining sentences, text organizing principles and practice their writing skills in fulfilling complex writing tasks.

[The fourth question of Questionnaire I], is meant for testing the knowledge about concepts and their coherence. A set of utterances exposing the process of a person becoming the Prime Minister were given in jumbled order. Students were directed to rearrange them properly so as to make the utterances a coherent paragraph. In this question, 86% of students had rearranged the utterances correctly and written them in proper order. The remaining 14% had failed in bringing the order.

**A Sample of Correct Answer**

*In the beginning, you need to become a leader of a political party. Then you must win a seat in the House of Common. After winning the seat in the House of Common, you must make*
sure you have a majority of seats. Finally, after all these steps, you can call yourself the Prime Minister.

A Sample of Wrong Answer

In the beginning, you need to become a leader of a political party. Winning the seat in the House of Common, you must make sure you have a majority of seats. Then you must win a seat in the House of Common. Finally, after all these steps, you can call yourself the Prime Minister.

Discourse is a sequence of words in terms of structure. In terms of surface conceptual organization, it is a sequence of propositions or concepts which are any way reflected by the sentences. The coherence of a discourse lies not only in the organization of the proposition but also the linking and combining of these propositions. Moreover long discourse whether micro or macro will have central or peripheral proposition. The central proposition is the core or the kernel which may be neglected by certain sentences called “topic sentences”. In order to test the knowledge about conceptual organization of a text, knowledge about the proposition is important. Three tests were administered to students to test their knowledge in discourse conceptual dynamics or propositional organization. They are

1. Identifying the topical sentence reflecting the central proposition in a text.
2. Identifying the parts reflecting central theme (proposition) of the text.
3. Identifying the conceptual (propositional) sentence.

Sentence Identification (Semantic)

[The fifth question in Questionnaire –I] that was given for testing was to identify to which relationship the given sentences reflect. 10 different sentences reflecting spatial and temporal, cause and effect, comparison and contrast, specialization and generalization relationships were given in a mixed form. In this sentence identification task, 63% of students had identified more than 6 sentences correctly and 37% had identified less than 6 sentences. In general, they had difficulty in identifying sentences which are related in terms of addition, spatial
and temporal and specialization and generalizing relationships. This is mainly due to their lack of knowledge in the fundamental perspective of sentences in discourse. Since they had studied about connectives or markers that are used for representing relationships such as cause and effect, compare and contrast, etc in between sentences in school, they are aware of these markers and had identified them easily. They are not well exposed to the use of the other markers representing spatial, addition, temporal and generalizing relationships and so they were not able to identify and they had interchanged these markers.

Samples of Wrong Answers

i) Many companies are located near Toronto. (Instead of writing it as ’spatial’, they have identified as temporal)

ii) She is the new Prime minister. Previously, she worked as a lawyer in California. (Instead of writing it as ’temporal’, they have written it as ’spatial’).

iii) On the whole, English is acclaimed as the global language. (No student has identified it as ’Generalizing’. Instead they had written ’spatial’, temporal and ’addition’, etc.)

Students are aware of the grammatical pattern of sentences. But they are not aware of the conceptual relationship between sentences in a discourse. They were not taught to identify such propositional relationships. Hence this area has to be given importance while imparting discourse knowledge.

Remedial Measures

i) The list of different kinds of discourse markers and their functions should be given to the students before giving any writing work. They also should be made to understand that overuse and misuse of discourse markers will result in the distortion in the meanings of the discourse.
ii) In the conversion of sentences from active to passive, the grammatical processes like interchanging the subject and object, changing the verb pattern and omission of ‘by’ agent can be taught over and again.

iii) Their self-confidence level can be increased.

iv) In the engineering syllabus, discourse can be incorporated so that discourse oriented teaching will enhance their technical writing.

Conclusion

From the results of the analysis, it was found that 30-40% of the students were good at conversion of sentences (from active to passive) and combining sentences and the remaining 50-60% did not have knowledge about the conversion method involved in active and passive constructions. On the other facet, students were extremely poor in conversion of sentences (from affirmative to negative). They were not able to change into negative without altering its sense or meaning. They were not aware of the different methods of conversion.

In the combining sentences and sentence identification only 50% of the students fared well. Remaining students need rigorous training and continuous practice. In the reorganization of sentences it was a simple question with just five sentences. 80% of the students were able to reorganize the first question as it was easy. In the analysis it was found out that when students use appropriate devices, they produce cohesive discourses. On the whole, these tests have proved that respondents have very limited exposure and training related to discourse knowledge. Unless the respondents have enough knowledge about discourse, they cannot exhibit their skills in comprehension and production which will be the next stage or the stage of discourse performance.

References


Language in India www.languageinindia.com 12 : 9 September 2012

P. Mangayarkarasi, M.A., M.Phil., M.Ed.
A Study on Testing the Proficiency of Discourse Knowledge in Engineering College Students in Coimbatore, Tamilnadu, India


P. Mangayarkarasi, M.A., M.Phil., M.Ed.
Department of English
Sri Ramakrishna Engineering College
Vattamalaipalayam, NGGO Colony
Coimbatore-22
Tamilnadu
India
mangai_sanju@yahoo.com