

Evaluating the Written Discourse of Students Using English as a Second Language

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Abstract. This article draws on an earlier paper (Jones, 2000) about task-based learning as a means of helping students to develop their second language use. In that paper I described the task demands and how the programme design made it possible to examine the students' responses to them: the essays they produced, their reactions and their perceptions of how they worked. Here I focus only on the essay texts.

A key problem of assessing students' essays is the difficulty of avoiding subjectivity. Here I present the assessment criteria again, reiterating briefly the rationale I used for the design. Then I discuss a systemic functional method for examining the essay texts according to their thematic progression (Danes, 1974), thus focusing on language use rather than on linguistic form: on acceptability rather than on accuracy.

The essay texts of two students addressing the same integrated skills task are analysed and compared to investigate how their marks according to the assessment criteria might be explained in more detail.

Introduction

In my earlier paper on learner-centred activity (Jones, 2000) I presented the case for taking account of the whole context of learning in examining students' second language use. I argued that a key factor in understanding their performance is the ways in which students relate to that context and that this means investigating how they strategically relate to the task demands and how they can use their metacognition to understand both those demands and their own strengths and weaknesses in that context of learning.

Obviously, the key factor in understanding the students' second language use is the message that is presented in their essay texts. This kind of understanding does not consider the students' attitudes and approaches to the task in hand but limited to what is available to the reader. In other words, it is, in Halliday's terms, the textual function of the essay or text as message. Thus, by no means does it tell the whole story. But it does do something very important, which is to suggest how we might arrive at a deeper understanding of the writer's ideation in the act of creating the essay text.

Hallidayan grammar has illuminated ways of understanding text by proposing a functional approach rather than a structural approach. In the textual function, the structure of the text is understood in terms of how the message is conveyed. The objective of the exercise I embark on here is to suggest how a functional analysis might reveal how the reader, as a key player in the student's development, whether as instructor or assessor or both, can gain access to the mind of the student as writer.

The five-month programme I described in Jones (2000) comprised a series of five integrated skills tasks, each supported by pre-task and post-task activities. Here I examine the essay texts by two students for the fifth and last task.

An overview of the two texts

The two essays are those of Keiko and Takako. The task instruction was:

Show how the discovery of the gene has led to important developments in science.

Both essays are presented in full in appendix 1. They were assessed using four main criteria. One was *overall impression*. The other three were designed to describe language use: *content, organisation and language*. The marks ranged within the following five bands using intervals of 0.25 as appropriate:

5 (excellent)	Language use will greatly facilitate academic success at undergraduate level.
4 (good)	Language use will facilitate academic success at undergraduate level.
3 (fair)	Language use may facilitate academic success at undergraduate level.
2 (poor)	Language use will hinder academic success at undergraduate level.
1 (very poor)	Language use will greatly hinder academic success at undergraduate level.

In order to achieve reliability, four assessors discussed and agreed a mark for each criterion. Below are the final marks given to the two students for Task 5 with a brief summary to explain them. The criteria are indicated by their initials.

Keiko's essay

OI - 4:	addressing all parts of instruction; comprehensive, well organised and mostly intelligible.
C - 4:	all relevant; main points supported by detailed examples and helpful diagrams.
O - 4:	well ordered main points; appropriate introduction and conclusion; some problems with distinguishing main and subordinate points.
L - 4:	mostly coherent using appropriate discourse genre; fairly wide range of lexis and structure.

Takako's essay

- OI - 2: addressing the instruction; short; fairly intelligible; patchy organisation; limited scope
- C - 2.25: mostly relevant; some distortion of detail; only partly substantial
- O - 1.75: overall framework only partially clear; ideas sometimes quite well linked
- L - 2.25: meaning mostly clear; problems with accuracy and lexical choices.

The marks show clearly that Keiko's essay was at a much higher level than Takako's essay according to the assessment criteria. We now turn to the analysis so as to examine both in more detail.

Methodological Framework for the Analysis

The system used to analyse the essay texts is drawn from the principles of Halliday's functional grammar, which describes language use rather than language as a form. It describes language as a dynamic process that is used to making meaning rather than as something static. Whereas traditional grammar examines structure at the level of clause, functional grammar permits an analysis of the text as discourse. Linguistic features are perceived as interdependent units rather than as units that are separated and isolated from one another and they can be examined in terms of the three metafunctions, ideational, interpersonal and textual, and at different levels, ranging from the levels of context, through text, clause, lexico-grammar, down to the morpheme. Such an approach facilitates an examination of the students' essay texts as a whole. As already mentioned, the analysis focused on the textual metafunction. Therefore the main questions were:

How successful are the students' essay texts in conveying meaning to the reader?

In what ways are meanings conveyed to the reader?

Alonso Belmonte and McCabe-Hidalgo (1998), in their analysis of the essay texts of Spanish students writing in English, show how Halliday's Theme/Rheme construct as the analytical tool, which I will discuss later, permits us to evaluate student writing. This approach can reveal the nature and degree of thematic continuity and thematic progression in the text in relation to cohesion as Bloor and Bloor (1995), Halliday and Hasan (1976) and Thompson (1996) have also argued. It also permits an analysis of two key features in scientific writing at the lexico-grammatical level, the uses of nominalisation and the passive form of the verb (Halliday and Martin, 1993).

Briefly, my analysis covered the following features: thematic organisation, textual cohesion, nominalizations and verbs in the passive form. All were considered in terms of their functional acceptability and their grammatical accuracy in relation to conveying the meaning.

The unit of analysis was taken to be the T-unit. The term T-unit, where "T" refers to "Theme", is suggested by Fries (1994). It refers to a unit with one 'Theme' that, structurally, contains one independent clause and includes all the clauses and adjuncts that are dependent on it. For example, in the following passage there are four

independent clauses (underlined) and therefore four T-units (separated by |). Each T-unit can end with, either, a full stop, a semi-colon or nothing if it is followed by a conjunction leading into the next T-unit.

Most modern wind turbines have a rotor which rotates around a horizontal axis| and the rotor normally has two or three blades.| Machines with a 5m to 15m diameter rotor are being used successfully by a few small businesses such as farms;| they can produce 25 to 125kW of electrical energy, or enough for 25 to 120 homes.

Each T-unit was separated into Theme and Rheme. Then it became possible to examine the thematic organisation. Textual cohesion was examined through thematic progression and the use of anaphoric referencing. Scientific discourse was examined at the lexico-grammatical level through nominalisations and passive verb forms. Now each of these features is discussed below in turn.

THEME/ RHEME

Halliday takes the Theme as the initial constituent within the clause: 'the element which serves as the point of departure of the message; it is that with which the clause is concerned.' and says that it is developed in 'the Rheme' which is 'the remainder of the message' within the clause (1994: 37).

Themes can be marked or unmarked. The typical unmarked Theme in English declarative clauses is the subject of the clause. It is realised by the nominal group and contains ideational information. The nominal group can be one word, a noun or pronoun, or a complex group that may even contain an embedded clause. The examples below are thematically connected. In each T-unit the Theme is underlined and the Rheme is the remainder of the unit:

- 1 Water is essential for life.
- 2 This means that the freshness and safety of water are important.
- 3 Both have been a constant concern from earliest times.

In T-unit 2, the Theme represents all the information presented in T-unit 1 with the pronoun acting as an anaphoric reference. This type of cohesion is discussed in more detail later. In T-unit 3, the Theme takes up the new information presented in the Rheme of T-unit 2.

In contrast, Marked Themes are those where the information is emphasized in some way, which is untypical in English. They may give new information rather than given information, i.e. information that has already been introduced before, often in the preceding Rheme. Most commonly in English emphasis occurs in the Rheme. The examples below follow on from Example 3:

- 4 The first civilisations settled around rivers.
- 5 The sinking of wells for fresh water was one of their first achievements.
- 6 What technology did they use?

In T-unit 4, the Theme is unmarked since it takes up the Rheme in T-unit 3. However, in T-unit 5, the Theme is marked because it presents new information, although

'fresh water' does refer to the Rheme of T-unit 2. But the reference to the previous T-unit, 4, occurs in the Rheme with the anaphoric 'their'. The Rheme also presents further new information. The Theme in T-unit 6 is marked because it signals the need for further information. Such direct questions are less common in written than in spoken English because of their more informal interpersonal function. Below is another example of marked Theme in subject position:

7 What enabled Darwin to develop his theory of evolution was his discovery of many different species on the Galapagos islands.

In T-unit 7, the Theme is clearly marked because it emphasises information that is to be completed in the Rheme.

A marked Theme may also be a circumstantial adjunct that occurs at the beginning of the T-unit before the subject. It takes the form of an adverbial group or prepositional phrase. Halliday identifies nine types: extent, time or place location, manner, cause or reason, contingency, accompaniment, role, matter, angle. Six of these are relevant to the analysis of these students' written texts:

- 1 extent
- 2 time or place location
- 3 manner
- 4 cause or reason
- 5 contingency
- 6 angle (or perspective)

An example of each circumstantial adjunct as marked Theme is underlined in the following short texts. The type of adjunct is indicated by the relevant number:

By the early 19th century (1), contamination of city water supplies was becoming serious. There were four cholera outbreaks in Britain between 1831 and 1866 killing thousands. Jon Snow proved that the outbreaks in London were linked to a public well contaminated by privy vaults nearby. When the health hazards of privy vaults became clear (4), people began to discharge their waste into the drainage system designed to take rain-water to rivers.

Through calls for better sanitary conditions by influential campaigners (3), the 1875 Public Health Act came into being. Inspectors were hired to check on standards of water supply and drainage and new sewers were built to separate waste from fresh water supply.

Some scientific forecasts suggest that over the next 30 years the average temperature at the earth's surface may rise by 2C to 3C. If this does happen (5), the ice at the North and South Poles will start to melt, causing the sea level to rise. At the moment (2), scientists cannot predict what the change will be. Judging from the way the climate seems to have behaved in recent years (6), making reliable predictions is not easy.

There are two more types of Themes in subject position. They contain no ideational information but serve solely to focus attention on the Rheme. These are known as 'empty' subjects. Most commonly they are 'it', which has a purely structural function, and 'there', which introduces

existential process (Bloor and Bloor, 1995: 125) as in:

It is important not to take clean water for granted.

There are many parts of the world where water purification is a problem.

Pronouns such as 'we' may also be used as an empty subject to introduce a generalisation about existence.

Sometimes Conjunctions and Conjunctive Adjuncts are positioned at the beginning of the T-unit. They do not themselves carry ideational information but are textual elements that provide 'a cohesive bond between two clauses' (Halliday, 1994: 324). They form a part of the Theme but cannot present it as a whole. Conjunctions provide a paratactic link between two T-units and comprise elements such as 'and', 'but' and 'or'. Halliday identifies conjunctive adjuncts that signal three types of expansion in the message: Elaboration, Extension (additive or adversative) and Enhancement (1994: 325).

- i Elaboration is where further clarification or explanatory information is given. It is introduced by such conjunctive adjuncts as: 'for example', 'thus', 'in other words'.
- ii Extension is where additional information in support of or in contrast to the information is given. Supporting information, i.e. additive, would be introduced by such conjunctive adjuncts as: 'and', 'moreover', 'in addition', 'nor'. Contrasting information, i.e. adversative, is introduced by such conjunctive adjuncts as: 'on the contrary', 'apart from that', 'alternatively'.
- iii Enhancement is where the meaning of the previous clause is qualified in some way and thus the text develops. It would be introduced by such conjunctive adjuncts as: 'therefore', 'in conclusion', 'on account of this', 'nevertheless'.
- iv Modal adjuncts have an interpersonal function and may also be positioned at the beginning of the T-unit. They express the attitude of the writer but do not give any ideational information. The two texts below contain examples of conjunctive and modal adjuncts signalling these different types of extension (shown in italics):

The decision to develop wind turbines depends partly on their cost. *But additionally*, it depends on the effect they will have on the environment. *For instance*, they would need to be grouped together in wind farms or parks, which may not be aesthetically pleasing for many people.

Like most satellites, ERS-1 uses advanced solar-powered batteries. *But* the batteries can only store enough energy for one orbit, which takes about 100 minutes to complete. *So* the first, and most critical, task for the satellite controllers will be to open its solar panels. *Fortunately*, this operation should not take long.

Here the conjunctive adjunct 'But additionally' introduces additive extension and 'For instance' introduces elaboration. 'But' is an example of an adjunct introducing adversative extension. 'So' introduces enhancement. 'Fortunately' is a modal adjunct.

Conjunctions, Conjunctive Adjuncts and Modal Adjuncts may occur in many parts of the clause. But this analysis only deals with those that occur at the beginning of the T-unit as a part of the Theme. They are treated as one item using the abbreviation C.

TEXTUAL COHESION

The analysis examines textual cohesion through a focus on two features:

- A thematic progression using the tool of the Theme/Rheme construct, as already mentioned,
- B anaphoric reference, which focuses more on the lexico-grammatical level.

A Thematic Progression

Thematic progression, introduced by the Prague School of Linguistics and attributed to Danes (1974), refers to certain kinds of information structure that are created by the sequencing of Theme and Rheme in relation to given/new information - whether the Theme and Rheme contain given or new information, or given and new information; whether emphasis is effected in some way e.g. through a marked Theme or whether given information is delayed in the Rheme. Danes proposed the following four major patterns of thematic progression. They are clearly summarised by Bloor and Bloor (1995) and Alonso Belmonte and McCabe-Hidalgo (1998) below. Each is followed by an example where the Theme is underlined:

- i simple linear progression, 'where an item from the Rheme of the first clause becomes the Theme of the subsequent clause'. In the Rheme it is presented as new information and in the following Theme as given information. For example:

The ancient Greeks used a system of pipes and tunnels to transport water from reservoirs to cities. Pipes were made of clay and glazed on the inside.

Here, 'Pipes' in the first Rheme becomes the second Theme.

- ii constant progression, 'where the item in the Theme of the first clause is also selected as the Theme of the following clause'. For example:

The first civilisations settled around rivers. They sank wells for fresh water.

Here, the first Theme becomes the second Theme, indicated by the anaphoric reference, 'They'.

- iii derived hyperthematic progression, 'where the particular Themes in subsequent clauses are derived from a "hypertheme" or from the same overriding Theme'. For example:

The search for fresh and safe water has been a constant concern from earliest times. The first civilisations settled around rivers, and one of their first technological achievements was the sinking of wells for fresh water.]

As city populations grew, natural water supplies could not keep pace with demand. Ancient peoples solved the problem by building reservoirs for storage, and canals and aqueducts for moving water from

sources to settlements.]

Here the hypertheme 'a constant concern from earliest times' is transformed to 'the first civilisations', 'city populations' and 'ancient peoples'.

- iv split progression, 'where the Rheme of the first clause is split into two items, each in turn being then taken as a Theme element in the subsequent clause', as in the following example:

The ancient Greeks used a system of pipes and tunnels to transport water from reservoirs to cities. Pipes were made of clay, cemented together and glazed on the inside. Tunnels were built large enough to encase them.

Here, the two elements 'pipes' and 'tunnels' in the first Rheme are taken up separately as the two subsequent Themes.

B Anaphoric Reference

Anaphoric references are cohesive devices that 'point backwards' to items already mentioned in the text (Halliday, 1994). Two types are: personal reference, where a previously mentioned noun is represented by a personal pronoun e.g. they, his, it; and demonstrative reference to a previously mentioned NG, represented by the use of demonstrative pronouns e.g. these, that. Another type is called substitution, which is 'a linguistic token' (Thompson, 1996) to an item that has just been mentioned: e.g. 'the same', 'some', 'the other one'.

Anaphoric referencing occurs in another cohesive device: lexical cohesion, which Bloor and Bloor (1995) describe as 'the use of lexical items in the discourse where the choice of an item relates to the choices that have gone before.' (p. 100). Two types are: repetition of the same item and the use of a general noun that refers to something specific that has already been mentioned or described, such as: 'situation', 'incident', 'phenomenon'. Here, repetition of the same item is signified as given information if it is important for thematic progression. Otherwise it is not indicated. However, the use of a general noun referring to something specific is indicated as an anaphoric reference.

In the following short text the anaphoric references are underlined:

In Darwin's 'On the Origin of Species', the author describes the different species of finch he found on each of the Galapagos islands. These are a group of volcanic islands over 900 km off the coast of South America, in the Pacific Ocean.

'The author' is substituted for 'Darwin'. The personal pronoun 'he' refers to 'Darwin' and 'the author'. The demonstrative pronoun 'these' refers to the Galapagos islands. It is important that they are positioned soon after their referents because this makes them clearly identifiable.

NOMINALISATION

Nominalisations are a certain type of NG: a phrase that structurally behaves like a noun. Nominalisations express processes as things. For example, the sentence: 'Genes are inherited from parents' can become nominalised into

'Genetic inheritance' or 'The inheritance of genes'. Halliday and Martin (1993) describe nominalisation as grammatical metaphor since a process is transformed into a more abstract phenomenon. This is a common feature of scientific discourse. A great deal of information can be compacted through nominalisation as Eggins shows in the following example where the logical relationship between two events is expressed: e.g. 'The reason for the late submission of my essay was the illness of my children.' (1994: 57). Structurally there are many types of nominalisations that occur in nominal groups as shown in the five sentences below. Each nominalisation is underlined and preceded by a number for reference:

- (1) The process by which we inherit our characteristics depends on (2) structures in our cell nuclei called chromosomes.
- (3) The relationship between the gene's code and the protein it makes is very precise.
- (4) The techniques involved in genetic engineering are complicated.
- They can increase (5) the speed of animal-breeding programmes.
- (6) Designing plants that grow faster can have world-wide benefits.

In these examples, the nominalisations are quite complex. The nominalisation in (5) is complex since there are two nominalisations brought together; 'animal-breeding programmes' is embedded in 'the speed'. The initial nominalisations in (1), 'The process', (3), 'The relationship', and (4), 'The techniques involved', are also complex through additional embedding that is the result of another process: 'inheriting', 'making' and 'genetic engineering' respectively. The process 'called chromosomes' in (2) is embedded in the NG 'structures in our cell nuclei'. (6) describes an action and could be expressed as 'The designing of plants...'. Such nominalisations are typical of what Halliday refers to as an 'act' (1994: 248) because it is an action that is being described.

Nominalisations can be simple and complex to different degrees. Here, both types are considered. Simple nominalisations are defined as those that indicate only the result of one process, e.g. 'The production of energy', whereas complex nominalisations are defined as those that indicate that the results of more than one process are involved in some way. For example, in: 'the birth rate [of a baby [having an inherited disease]]' the results of three processes are involved: a disease that is inherited, an inherited disease that is passed on to a baby, and the fact that a number of babies are born with that kind of disease. Each nominalisation is linked through hypotaxis ('of a baby') or embedding ('having an inherited disease') as indicated by the brackets.

PASSIVE VERB FORMS

Three types of passive verb forms are considered: finite and non-finite, including modal constructions, and elliptic forms where only the verb participle is given to represent action. They are typical features of scientific written discourse because they highlight the process rather than the participant or agent and thus can be said to be marked

elements. In their finite uses, they can be simple or extremely complex constructions depending on time and modality. Non-finite uses are mainly infinitives. The following two texts contain a variety of examples (underlined). They are numbered as follows:

- (1) for finite passive verb forms,
- (2) for non-finite verb forms,
- (3) for elliptic forms.

Linnaeus named 5,900 plant species using a binomial system. Today, well over 200,000 plant species (1) have been identified and (3) named in this way...If two scientists working separately discover the same plant or animal species in different places, and give it two different names, the name (3) used is the first one (2) to be published in a scientific work.

Removing an enzyme from a cell blocks the chemical pathways. This means that the chemicals that (1) would have passed through the enzyme build up very quickly. Ultimately, the cell's chemical balance (1) is destroyed and it fails. The cell's function (1) can be restored only by replacing the enzyme.

They are grouped together as one item in this analysis.

Results and Discussion of the Analysis

The selection of each T-unit is based on the message regardless of punctuation marks, since these may have been used erroneously. As appendix 1 indicates, Keiko's essay was longer than Takako's. It contained 28 T-units and 395 words while Takako's essay contained 22 T-units and 240 words which also means that the T-units in Takako's essay were generally much shorter than those in Keiko's essay. A detailed analysis of both essays is given in appendices 3 and 4.

Tables 1 and 2 below present a summary showing a comparison of the main features in both essays. In table 1, the four types of thematic progression found in both essays are listed. The second and fourth columns give total number of times a type of progression is used. The third and fifth columns indicate in which T-units it is used and can therefore only be understood by referring to appendices 3 and 4. For example, 1-2 indicates: from T-unit 1 to T-unit 2.

Table 1. Thematic progression in Keiko's and Takako's essays

<i>Progression type</i>	Keiko		Takako	
	All	T-unit position	All	T-unit position
simple linear	10	3-4,6-7-8-9, 14-15,18-19, 20-21-22-23, 25-26	7	2-3, 6-7, 8-9, 12-13,15-16-17, 19-20
constant	7	1-2,4-5,6-7, 15-16-17,24-25,26-27	3	1-2, 5-6, 10-11
derived hyperthematic	5	1(3-10),1(11-13), 2(14-16), 2(20-27), 16(17-19)	0	
split	1	11-13	1	12-14

Table 1 shows that in Keiko's essay thematic progression is very clear. Almost all T-units are related either through simple linear progression or constant progression. The

others are linked through split progression. In addition, the themes are linked through hyperthematic progression (see appendix 3). In fact there are three hyperthemes: 'the discovery of the gene', 'the application of the gene' and 'inheriting disease'. Hence the development of the text is clear with the final T-unit recalling the hyperthemes.

In Takako's essay there is also evidence of thematic progression. But it is not always clear to follow for two reasons. Firstly the sequencing of simple linear progression and constant progression is never more than once, i.e from one T-unit to the next; secondly, some T-units are not involved in any progression. Themes are suddenly positioned as marked Theme e.g. 'genetic engineering' and 'the scientist' thus interrupting progression.

Table 2 gives more information about thematic progression by indicating marked Theme (MK), the use of circumstantial adjuncts (CA) and whether or not the Rheme contains new information (NI-Rh). It also gives information about other thematic elements, empty Theme (E) and conjunctions, conjunctive adjuncts and modal adjuncts (C). Further information about textual cohesion is given by indicating the use of anaphoric references (AR) and, at the lexico-grammatical level, the uses of nominalisations – simple (SNom) and complex (CNom) – and of passive verbs forms (PV). In the second and fifth columns with the heading 'Total' the total number of uses are given for each feature; the third and sixth columns have the heading '/' to indicate the number of acceptable uses, and the fourth and seventh columns have the heading 'x' to indicate the number of unacceptable uses. Acceptability is determined by whether coherence is affected due either to poor cohesion or inaccuracies that affect clarity of meaning for the reader.

Table 2. The other main features of analysis for Keiko's and Takako's essays

Feature	Keiko			Takako		
	Total	/	x	Total	/	x
MK	9	9	0	11	10	1
CA	5	4	1	3	3	0
E	1	1	0	0	0	0
C	6	6	0	1	1	0
NI-Rh	27	27	0	22	16	6
AR	26	23	3	19	17	2
SNom	8	8	0	5	5	0
CNom	7	5	2	3	3	0
PV	12	12	0	4	4	0

Table 2 shows that in Keiko's essay markedness in Theme occurs nine times in twenty-eight T-units whereas in Takako's shorter essay it occurs eleven times in twenty-two T-units. Thus thematic continuity is interrupted in this manner more frequently in Takako's essay than in Keiko's essay. Apart from one case in Keiko's essay, in both essays the Rheme always contains new information. However, whereas it is always acceptable in Keiko's essay, in Takako's essay it is unacceptable in six out of twenty-two cases. In some of these latter cases there is a strong interpersonal quality reflecting the writer's attitude through making a comment rather than conveying information.

In Keiko's essay, anaphoric references of all types are used extensively, which is very helpful for cohesion. In

Takako's essay they are used fairly frequently but are not varied.

There are differences in the uses of the other features. Generally it is evident that Keiko uses more conjunctions, nominalisations and passive verb forms than does Takako. For both students, these features are acceptable apart from two complex nominalisations used by Keiko.

In Keiko's essays there are sufficient number of conjunctions and adjuncts to give variety thematically and a good range of nominalisations and passive verb forms to produce an appropriate discourse genre. In Takako's essay the range is more limited and her use of English is less complex both structurally and in appropriacy.

Turning to the assessment criteria, Keiko's assessment marks fall within Band 4: Language use will facilitate academic success at undergraduate level. Takako's marks are mainly within Band 2: Language use will hinder academic success at undergraduate level. It seems that the analysis does support these marks. What is interesting is that the more holistic nature of the assessment criteria that unavoidably permits a degree of subjectivity on the part of the assessors, are supported by this analysis even though linguistic accuracy has been backgrounded in order to highlight the ways in which meaning has been successfully conveyed.

Conclusions

The analysis presented in this article has revealed significant differences between the two essays: thematically and structurally. It has not examined linguistic features at the micro level since these tend to detract from the main objective of language use, which is to communicate meaning.

What then are the implications of this study on students using English as a second or foreign language in their academic writing? As Belmonte and McCabe-Hidalgo (1998) argue, I suggest that a focus on thematic progression encourages a cognitive approach on the part of teacher and student and that this is highly desirable. By focusing on thematic progression in essay writing, we encourage a recognition that it is the ideational, particularly the experiential, meaning that drives the linguistic choices that writers make. Students need to be encouraged to give expression to their own voice and need to find a way of communicating their meanings to the reader and of organising their selected thematic content in their essays. However, a further dimension, viz. the perceptions of the students themselves in writing tasks in this way need to be a part of the shared research and teaching / learning processes. That is another story.

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Studentų anglų kalbos rašto darbų vertinimas

Santrauka

Šiame straipsnyje autorė tęsia anksčiau analizuotą temą (Jones, C.L., (2000). What does learner-centredness mean? The contributions of Halliday and Vygotsky to the development of second language use for specific purposes' in *Language Teaching /Learning in the Context of Social Changes*: Kaunas University of Technology, Faculty of Humanities, Centre of Foreign Languages, pp 94-98) apie užsienio (anglų) kalbos mokymą pasitelkiant įvairias užduotis. Šiame straipsnyje ypatingas dėmesys skiriamas rašymo užduotims.

Pagrindinė problema, kuri išskyla vertinant studentų rašinius, yra vertinimo subjektyvumas. Šiame straipsnyje autorė pristato rašinių vertinimo kriterijus, aptaria sisteminį funkcionalų metodą, naudojamą rašinių teksto analizei.

Empirinėje straipsnio dalyje autorė detalai analizuoja dviejų studentų rašinius, praktiškai taikydama teorinėje dalyje aptartus vertinimo kriterijus.

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Scientific Interests: the languages of science and mathematics, language for learning, argumentation, developing academic literacy.

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APPENDIXES. Evaluating the Written Discourse of Students Using English as a Second Language

APPENDIX 1

Keiko's Essay for Task 5

p.1	Discovery of gene enabled us to know how characteristics are transmitted from parent to off-spring. The interesting discovery led scientists to analyse it further and also apply it to usage. (2 diagrams)
p.2	A set of DNA, which included the code for start and stop to read, forms one unit of gene. A gene is stored in part of a chromosome and it is packed in a nucleus of a cell. Every information, which is required to form an organism and to continue the life is stored in pairs of chromosomes.
l.5	
p.3	The information is transmitted when reproductive cells of male and female join and produce the offspring. Reproductive cells have threads of chromosomes, but they are not in pairs. Therefore an offspring have both characteristics of parents. (diagram: (nucleus of) reproductive cell / fertilised cell)
p.4	There are two kinds of genes. One is the dominant, which produces a particular characteristic in an organ. And the other is the recessive gene whose characteristic only appears if the other gene has the same characteristic.
l.10	
	(diagram)
p.5	Even though it is usually more complicated, the principle remains the same. Therefore, this is used to design plants to a form which customers will prefer or which farmers can grow themeasily.
p.6	The same idea is used in the medical field. It is used to reduce the birth rate of the baby having inherited disease. Although parents look perfectly healthy, they might be carrying the recessive gene of a disease. If they take the examination to check whether they are the carries or not, they can prevent their baby to have the inherited disease. As a baby can be tested even at the eighth week of the pregnancy.
l.15	
p.7	Other way of applying the knowledge of the gene is the genetic engineering. It involves in altering genes. A gene is taken from an organism and placed in a bacterium. As bacteria reproduce rapidly, large quantity of product is made by following the information from transformed gene. Nowadays it is used industrially to produce enzymes and hormones, such as insulin. This skill is also applied to the medical treatment for inherited diseases. It is not yet perfect, but it is improving very rapidly.
l.20	
p.8	As long as scientists could be away from producing monsters or using the most private information to any unacceptable use, the study of genes and the application of it will bring us a new world.
l.25	

Takako's Essay for Task 5

p.1	We are all different. We have particular characteristics individually. This makes us happy to communicate with people. But parents and their childrens are similar. Because children inherit their characteristics through genetic transmission.
p.2	Gene - controls to form our characteristics. Male and female genes are combined together and define the children's characteristics. This study is called genetics. Nowadays genetics is most exciting study in medical world. This changes our future aspects of disease. Scientists can improve disease to control gene. They learned how to control gene cutting a gene sequence out of cells and placing it into another.
l.5	
p.3	For the patients who inherit the disease from parents. Scientists tried to put the gene which is called lymphocytes, to be able to fight infection. This new gene will make the enzyme, which protect and control the chemical reaction. Lymphocytes destroy any bad bacteria in our body. Genetic engineering takes the bone-marrow cells and produce the lymphocytes. This is a very important process to make it. If it is successful, lymphocytes take a good role in the future generations.
l.10	
p.4	Thanks to the discovery of controlling gene, we can stop suffering from the successive disease.
l.15	Scientists changed our gene not to infect the disease in the future. This is a very big discovery for us. Genetic Engineering is the science of changing the genetic structure of living organisms for a particular purpose. They have to treat very carefully. Because the gene is made naturally.

APPENDIX 2. A Guide to the Analysis

Each T-unit is analysed separately in turn according to the two elements: Theme and Rheme. Both of these are described in terms of whether they contain given, new or given and new information. If they contain given information, reference is made to the Theme or Rheme where it first occurs as new information. If the Theme is the first, denoted as T1, and refers to the task instruction it is not regarded as new information. If the Rheme is very short and contains no information, new or otherwise, it is marked 'none'.

A marked Theme in subject position is signified by MK and is assumed to present new information or information which has not appeared in a recent T-unit. A circumstantial adjunct is signified by CA, not MK, and is assumed to be marked. If the Theme begins with a conjunction or conjunctive adjunct this is signified by C. These abbreviations are given again below. The other elements - anaphoric reference, nominalisation and passive verb - are signified using brackets () or + to show how they are attached. Each paragraph is presented in turn. Each T-unit occupies a separate line. It is numbered in order of its occurrence in the text and is

marked in three ways as follows:

The Theme is underlined.

The initial conjunction or adjunct is in italics as well as underlined.

The nominalization is bracketed thus: []

Abbreviations and Symbols

(1) = T-unit 1

T1 = Theme 1

R1 = Rheme 1

MK = marked Theme

NI = new information

E = empty

CA(3) = circumstantial adjunct of manner

C = conjunction, conjunctive adjunct or modal adjunct

AR = anaphoric reference

SNom = simple nominalization

CNom = complex nominalisation

PV = passive verb form: finite, non-finite, elliptic

/ = combined with

+ = in addition

() = another characteristic

{ } = including

* = not acceptable

[] = nominalisation

APPENDIX 3. An Analysis of Keiko's Essay

Paragraph 1

(1) [Discovery of gene] enabled us to know how characteristics are transmitted from parent to off-spring.

T1 = SNom

R1 = NI{PV}

(2) [The interesting discovery] led scientists to analyse it further and also apply it to usage.

(2 diagrams)

T2 = T1(SNom)

R2 = NI{AR(T1) + AR(TI)}

Paragraph 2

(3) [A set of DNA, which included the code for start and stop to read], forms one unit of gene.

T3 = MK/NI(CNom*)

R3 = NI+T1

(4) A gene is stored in part of a chromosome

T4 = R3

R4 = NI{PV}

(5) and it is packed in a nucleus of a cell.

T5 = C + T4(AR)

R5 = NI{PV}

(6) [Every information, which is required to form an organism and to continue the life] is stored in pairs of chromosomes.

T6 = MK/NI + R1(CNom{PV})

R6 = R4{PV} + NI

Paragraph 3

(7) The information is transmitted when reproductive cells of male and female join and produce the offspring.

T7 = T6

R7 = NI{PV} + R5 + R1(AR)

(8) Reproductive cells have threads of chromosomes,

T8 = R7

R8 = NI + R6

(9) but they are not in pairs.

T9 = C + R8(AR)

R9 = NI + R6

(10) Therefore an offspring has both characteristics of parents.

(diagram: (nucleus of) reproductive cell / fertilised cell)

T10 = C + MK(R1)

R10 = NI + R1/R7

Paragraph 4

(11) There are two kinds of genes.

$$T11 = E$$

$$R11 = NI + T1$$

(12) One is [the dominant, which produces a particular characteristic in an organe].

$$T12 = R11(AR)$$

$$R12 = NI(SNom\{R11(AR) + R1/R10\})$$

(13) And the other is [the recessive gene whose characteristic only appears if the other gene has the same characteristic].

(diagram)

$$T13 = C + R11(AR)$$

$$R13 = NI(CNom*\{R11 + R1/R10 + T12(AR) + R12(AR)\})$$

Paragraph 5

(14) Even though it is usually more complicated, the principle remains the same.

$$T14 = MK/CA^*$$

$$R14 = NI + R7(AR)$$

(15) Therefore, this is used to design plants to [a form, which customers will prefer or which farmers can grow them easily].

$$T15 = C + R14(AR)$$

$$R15 = NI\{PV + CNom(AR^*)\}$$

Paragraph 6

(16) The same idea is used in the medical field.

$$T16 = R14/R15(AR)$$

$$R16 = NI\{PV\}$$

(17) It is used to reduce [the birth rate of the baby having inherited disease].

$$T17 = T16$$

$$R17 = NI\{CNom\{R1\}\}$$

(18) Although parents look perfectly healthy, they might be carrying the recessive gene of a disease.

$$T18 = MK/CA(R1)$$

$$R18 = NI\{AR(T18) + R13 + R17\}$$

(19) If they take the examination to check whether they are the carriers or not, they can prevent their baby to have the inherited disease.

As a baby can be tested even at the eighth week of the pregnancy.

$$T19 = MK/CA\{AR(T18/R18) + R18\}$$

$$R19 = NI\{AR(T18/T19) + AR(T19) + R17\}$$

Paragraph 7

(20) [Other way of applying the knowledge of the gene] is [the genetic engineering].

$$T20 = MK(CNom(AR + R2))$$

$$R20 = NI(SNom)$$

(21) It involves in altering genes.

$$T21 = R20(AR)$$

$$R21 = NI + T1/T20$$

(22) A gene is taken from an organism and placed in a bacterium.

$$T22 = R21$$

$$R22 = NI\{PV + PV\}$$

(23) As bacteria reproduce rapidly, large quantity of product are made by following the information from [transformed gene].

$$T23 = MK/NI/CA(R22)$$

$$R23 = NI\{AR(T23)\} + PV + SNom(AR(R21))\}$$

(24) Nowadays it is used industrially to produce enzymes and hormones, such as insulin.

$$T24 = C + R20(AR^*)$$

$$R24 = NI\{PV\}$$

(25) This skill is also applied to [the medical treatment for inherited diseases].

$$T25 = T24(AR)$$

$$R25 = NI\{PV + CNom\{R1/R17\}\}$$

(26) It is not yet perfect,

$$T26 = R25(AR^*)$$

$$R26 = \text{none}$$

(27) but it is improving very rapidly.

$$T27 = C + T26$$

$$R27 = NI$$

Paragraph 8

(28) As long as scientists could be away from producing monsters or using the most private information to any unacceptable use, [the study of genes [and [the applicaton of it] will bring us a new world.

T28= MK/NI/CA

R28= NI + T1(SNom) + R2(SNom(AR))

APPENDIX 4. An Analysis of Takako's Essay

Paragraph 1

(1) We are all different.

T1

R1= NI

(2) We have particular characteristic individually.

T2= T1

R2= NI + R1

(3) This makes us happy to communicate with people.

T3= R2(AR)

R3= NI{AR(T2)}

(4) But parents and their childrens are similar. Because children inherit their characteristics through [genetic transmission].

T4= C + MK/NI{AR}

R4= NI{SNom + AR(T4)}

Paragraph 2

(5) Gene - controls to form our characteristics.

T5= MK/NI

R5= NI* + R4{AR(T1/R3)}

(6) Male and female gene are combined together and define the children's characteristics.

T6= MK/NI + T5

R6= NI{PV} + R4

(7) This study is called genetics.

T7= R6(AR)

R7= NI{PV}

(8) Nowadays genetics is most exciting study in medical world.

T8= MK/NI/CA

R8= R7 + NI

(9) This changes our future aspects of disease.

T9= R8(AR)

R9= NI

(10) Scientist can improve disease to control gene.

T10= MK/NI

R10= NI* + R9 + T5

(11) They learned how to control gene cutting a gene sequence out of cells and placing it into another.

T11= T10(AR)

R11= R10 + NI{AR + AR}

Paragraph 3

(12) For the patients who inherit the disease from parents. Scientists tried to put [the gene which is called lymphocytes], to be able to fight infection.

T12= MK/CA/R4 + R10

R12= NI* + SNom{PV}

(13) This new gene will make [the enzyme, which protects and controls the chemical reactions].

T13= R12(AR)

R13= NI(CNom)

(14) Lymphocytes destroy any bad bacteria in our body.

T14= R12

R14= NI

(15) Genetic engineering takes the bone-marrow cells and produce the lymphocytes.

T15= MK(SNom)

R15= NI* + T14

(16) This is [a very important process] to make it.

T16= R15(AR)
R16= NI{SNom{AR(R15)} + AR*}

(17) If it is successful, lymphocytes take a good role in the future generations.

T17= CA/MK{R16{AR}}

R17= R12/R15 + NI

Paragraph 4

(18) Thanks to [the discovery of controlling gene], we can stop suffering from the successive disease.

T18= MK/CA{CNom{R10}}

R18= NI + R12

(19) Scientist changed our gene not to infect the disease in the future.

T19= MK(T10)

R19= NI*{AR} + R17 + R18

(20) This is [a very big discovery] for us.

T20= R19(AR)

R20= NI{SNom + AR}

(21) Genetic Engineering is [the science of changing the genetic structure of living organisms for a particular purpose].

T21= MK(T15)

R21= NI{CNom{T19}}

(22) They have to treat very carefully. Because the gene is made naturally.

T22= MK(R19(AR*))

R22= NI*{PV} + T5/R19