

CHARACTERISTICS AND USE OF TECHNICAL VOCABULARY IN HUNGARIAN MA TEFL STUDENTS' ACADEMIC ESSAYS

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Abstrakt: Štúdia skúma charakteristiku a používanie odbornej slovnej zásoby súvisiacej s jazykovou pedagogikou v akademických esejach maďarských študentov magisterského programu vyučovanie angličtiny ako cudzieho jazyka. Analyzujú sa jednoslovné výrazy, ktoré je potenciálne možné zaradiť do odbornej akademickej slovnej zásoby a určuje sa frekvencia ich použitia v bežnom a akademickom jazyku. Následne autorka skúma funkciu daných slov v skúmaných akademických textoch. Výsledky ukazujú, že značná časť výrazov potenciálne odbornej slovnej zásoby rovnako vykazuje vysokú frekvenciu použitia aj v bežnom, neodbornom jazyku a že presný význam identifikovaných slov špecifický pre daný odbor sa nie vždy v textoch uvádza. Význam týchto slov je často nejednoznačný, čo bráni vytvoreniu taxonomických vzťahov medzi príbuznými termínmi a presnému pochopeniu myšlienok prezentovaných v esejach. Zistenia poukazujú na potrebu zvyšovania povedomia o charaktere a špecifickom používaní odbornej slovnej zásoby v akademickom diskurze.

Kľúčové slová: anglické akademické písanie, technická slovná zásoba, frekvencia slov, definícia, taxonómia

Abstract: The study examines the characteristics and use of Language Pedagogy-related technical vocabulary in L2 English academic essays by a group of L1 Hungarian MA TEFL students. Potential technical vocabulary items consisting of single words and their frequency in general and academic word lists are identified, followed by an analysis of their function in the essays. Results show that a significant proportion of potential technical vocabulary items are high-frequency words according to both general and academic word lists, and that the precise discipline-specific meaning of the identified words is not always

indicated in the texts. The meaning of these words is often ambiguous, which hinders the development of taxonomical relationships between related terms, and a precise understanding of ideas put forward in the essays. The findings point to a need for raising awareness of the characteristics and discipline-specific use of technical vocabulary items in academic discourse.

Keywords: English academic writing, technical vocabulary, word frequency, definition, taxonomy

INTRODUCTION

The results of corpus-based frequency studies (Hyland and Tse 2009, Liu and Lei 2019, Nation 2013, Schmitt and Schmitt 2014) show that approximately 70-80 percent of the vocabulary of English-language academic texts is composed of general words and 10-20 percent belongs to the category of academic vocabulary. Vocabulary items belonging to the latter category are further divided into two groups: about 10 percent of the total number of words consists of general-academic vocabulary, that is words that can be found in texts across several disciplines, and a smaller proportion, about 5-10 percent of the total number of words, consists of technical vocabulary that carry a well-defined subject-specific meaning within a discipline. In this paper, I will focus on the latter category.

The term 'technical vocabulary' refers to single- or multi-word items which carry a well-defined discipline-specific denotative meaning within the framework of a given discipline, thus avoiding ambiguity in the field (Nation 2012, Nation and Coxhead 2013). In the literature, 'technical vocabulary' is also referred to as 'discipline-specific vocabulary', 'specialised lexis/vocabulary', 'terminological words' and 'terms' (Liu and Lei 2019). In the case of the Natural and Physical Sciences, it is typical that technical vocabulary items are clearly and distinctly separable from general words and often consist of words of Latin and Greek origin (Baker 1988, Ha and Hyland 2017). Examples of terms that fall into this category are *enzyme* (Biology), *polymerization* (Chemistry), *tectonics* (Geology), *vector* (Mathematics). However, in Humanities and Social Sciences, there is a large number of technical vocabulary items that are also used in everyday contexts (Dilin and Lei 2019). This means that soft science disciplines are characterised by the use of terms that may also carry a broader, different and/or multiple meanings depending on the general and academic contexts they are in used. Examples include *acquisition* (Applied Linguistics), *labour* (Economics), *personality* (Psychology), *revolution* (History).

While making sense of and developing academic texts in English can be challenging for L1 users too (Leki 2000), the task is even more complex for

novice L2 English academic writers. This is because they do not have access to the range and depth of vocabulary typical of L1 English speakers, and have less practice in using English composition techniques (Hyland 2003, Matsuda and Silva 2020).

This paper reports on the results of research carried out within the framework of an MA TEFL programme in a Hungarian university, where one of the requirements for students is to write academic texts in English. In this context, the challenges mentioned above are further complicated by the fact that TEFL students are required to write essays, seminar and research papers in several disciplines (i.e. History, Literature, Linguistics, Applied Linguistics and Language Pedagogy). The additional challenge here is that each of these disciplines have their own well-defined and distinct terminology and taxonomy, and different conventions characterise the expectations of academic writing (Biber and Conrad 2019, Hyland and Tse 2009).

My research focused on students' academic essays in the field of Language Pedagogy, one of the disciplines comprising the MA TEFL programme. My three aims were (1) to identify the words which have the potential to function as technical vocabulary in the essays according to the established conventions in Language Pedagogy, (2) to look at the frequency of these vocabulary items both in general and academic word lists, and (3) to examine whether and how these words serve the purpose of technical vocabulary in the texts.

My research questions were the following:

1. In the students' academic essays, which words have the potential to serve as technical vocabulary in the field of Language Pedagogy?
2. What is the frequency of the identified potential technical vocabulary items in general and academic word lists?
3. Do these items perform the role of technical vocabulary in the essays? If so, how?

Since an essential feature of technical vocabulary items is that they carry distinct and precise discipline-specific meaning, their accurate and clear comprehension and consistent use are particularly important in disciplines belonging to Humanities and Social Sciences, where the words which function as terms may also carry several, context-dependent general and academic meanings.

Below I will first establish a theoretical framework for the empirical study, looking at the roles technical vocabulary plays in academic discourse, as well as the characteristics of terms in relation to their frequency in general and academic word lists. This will be followed by a discussion of the research design and the description and discussion of the empirical research results.

THE ROLE OF TECHNICAL VOCABULARY IN ACADEMIC DISCOURSE

The aim of science is to understand and interpret the formation, characteristic features, functioning of and relationships between phenomena in the world. In order to achieve this aim, scientific activity creates systematic knowledge, as opposed to a common sense interpretation, based on a precise categorisation of information according to a set of clearly established rules (Halliday and Martin 2003, Hyland 2011). The effectiveness of scientific activity requires an appropriate scientific language, within which technical terms are used to define clearly and precisely the phenomena under study and to classify them according to a hierarchy. The taxonomies thus developed provide a means of examining and interpreting the interrelationships between the elements of the knowledge framework in disciplines, thus broadening and deepening our knowledge of the world (Wignell 1998).

Technical vocabulary, an indispensable means in scientific activity, fulfils essential functions in scientific activity. One of its roles is to establish the precise meaning of the terms, which is done by way of definition. This is the process of identifying and naming, from a clear scientific point of view, the phenomena observed in the world and the concepts that refer to these phenomena within a given body of knowledge. The other role of terminology is to classify the phenomena under study. This is a fundamental activity in science because it allows terms with precise meanings to be linked to other terms in order to be systematically classified. The third role of terminology is explanation, where the focus is on describing how the observed phenomena come into being and how they work (Martin 2003).

As was mentioned in the Introduction, disciplines in the Humanities and Social Sciences often apply words which are also in use in other contexts for terminological purposes. Thus, a given term may also carry broader, multiple and/or different meaning in general English. For example, *chunk* and *error* are specialised terms in Language Pedagogy, while carrying various broader meanings in everyday contexts. Furthermore, a term related to a particular discipline may also occur in other disciplines carrying a more general academic meaning. For example, *method* is a term in Language Pedagogy, while it is used in a general academic sense relating to empirical research in other disciplines too. Thirdly, there are examples of terms with distinct subject-specific meanings in different disciplines. One example is *fossilization*, which is a term in both Language Pedagogy and Geology carrying a distinct discipline-specific meaning in either case.

The widespread presence of general and academic words as technical vocabulary in the Humanities and Social Sciences has also been discussed in Nation's (2013, 12-19) research report. The study found that 45 percent of the technical terms in an English-language Economics textbook were general words and 30 percent academic words, while only 25 percent of the technical terms in the textbook comprised words that did not fall into the above categories. The research also found that the general and academic words that accounted for three-quarters of the technical vocabulary in the textbook were also high frequency vocabulary items: the general words were among the 2,000 most frequent ones in the General Service List (West 1953), while all the academic words were included in Coxhead's (2000) Academic Word List, a collection of the 570 most frequently used academic word families.

Nation's (2013) findings are relevant from the point of view of the present study for two reasons. On the one hand, they indicate that technical words which, at the same time, are also high frequency general and/or academic words, play an important role in the construction of a knowledge framework within a particular discipline. On the other hand, the results also highlight the importance, for novice writers, of a clear and precise understanding of the discipline-specific meaning of such terms and an ability to use them in a consistent way. This will make it possible for these vocabulary items to fulfil their role as technical terms in academic discourse: to define concepts, to classify them systematically, and to describe and interpret the phenomena associated with them.

RESEARCH DESIGN

In my empirical research, I analysed the texts of ten expository essays in Language Pedagogy. The essays were written by third-year full-time MA TEFL students as an assignment for their English Methodology course at the end of the 6th semester. In the essay, they discussed the question of how theories and research findings on second language acquisition can be used in teaching grammar in the EFL classroom. The essays were handwritten and took 45 minutes to complete. I digitised the texts with the consent of the students, ensuring the criteria of voluntariness and anonymity. This gave a total of 168 sentences and 3019 words in a mini corpus. Table 1 shows descriptive data of the students' texts in terms of sentence number, word count and sentence length.

Table 1**Descriptive data of the students' essays**

	Mean	Maximum	Minimum
Number of sentences / essay	17	25	12
Number of words / essay	302	418	249
Number of words / sentence	18	24	13

In the essays, I identified the words that are considered as specialised terms in Language Pedagogy. Following the judgement-based methodology of Chung and Nation (2003), I selected the words that are included as headwords with a definition in the Longman Dictionary of Language Teaching and Applied Linguistics (2010). This way I arrived at a list of single-word vocabulary items (n=24) which can potentially perform the role of a technical term in the students' essays because they have a well-defined and accepted denotative meaning in the discipline. The list of potential Language Pedagogy-related technical words can be found in Table 2.

Table 2**List of potential technical words in the students' essays**

Headwords in the Longman Dictionary of Language Teaching (2010)			
accuracy	competence	grammar	meaning
acquisition	drill	immersion	method
activity	error	input	mistake
approach	feedback	interlanguage	output
chunk	fluency	language	syllabus
communication	form	learning	task

I examined the frequency of occurrence of the 24 words in both general and academic word lists. Among the available English colloquial word lists, I used the New General Service List (NGSL) (2801 words) by Browne et al. (2013) and the New General Service List (new-GSL) (2494 words) by Brezina and Gablasova (2015). Both wordlists offer an alternative to Michael West's (1953) General Service List (GSL) (2000 words). One advantage of the new wordlists (NGSL and new-GSL) is that they exclude words which have become obsolete over time, and another advantage is that significantly larger corpora were used for their development. Also, they are lemma-based rather than word family-based, thus taking into account the fact that words derived from the same root

word sometimes have different meanings and cannot be inferred from the meaning of the root word.

In addition to the two word lists, I have also taken into account Nation's (2017) corpus-based frequency analysis (BNC/COCA), which has identified the 25,000 most frequently used English word families, grouped into thousands. Of these, the first 3 thousand words are considered high frequency, 3001 to 9000 are considered medium frequency, and 9001 and above are considered low frequency. Using the BNC/COCA, I identified words that were not included in the two new general word lists but are still considered high frequency.

Of the available general academic word lists, I used Gardner and Davies' (2014) Academic Vocabulary List (AVL) (3015 words). The features of the word list include that, unlike the previously developed Academic Word List (AWL) (570 word families) (Coxhead 2000), it does not automatically exclude words from the list that are found in the GSL. This makes it possible to see if a word has a high frequency in both general and academic contexts. Furthermore, the list in the AVL is lemma-based.

Using the above mentioned general and academic word lists, I examined the frequency of the 24 potential Language Pedagogy-related technical words identified in students' essays. This was followed by an analysis of the students' texts in order to see whether and how the 24 words fulfilled the roles technical vocabulary is expected to play in academic discourse. I focused my analysis on two such roles: definition and classification.

RESULTS AND DISCUSSION

Below I will first present the results of the frequency analysis. This will give insights into the characteristics of the potential terms identified in the students' essays in terms of whether they also occur in everyday contexts and/or in academic domains outside Language Pedagogy, and if so, with what frequency. I will then show whether and how the identified vocabulary items perform discipline-specific functions in the essays.

Frequency of Potential Technical Words According to Words Lists

The list of potential single-word language pedagogical terms (n=24) in the students' essays has been presented in Table 2 above, and their occurrence and frequency in general and academic word lists can be found in Table 3.

Table 3**Occurrence and frequency of the potential language pedagogical terms in word lists**

	Word Lists	Number of terms	Mean value of terms (%)	List of terms
General English	NGSL and/or new-GSL	13	54,2	<u>acquisition</u>, <u>activity</u>, <u>approach</u>, <u>communication</u>, <u>error</u>, <u>form</u>, <u>input</u>, <u>language</u>, <u>learning</u>, <u>meaning</u>, <u>method</u>, <u>output</u>, <u>task</u>
	BNC/COCA high frequency	4	16,7	accuracy , drill, grammar, mistake
	BNC/COCA mid-frequency	5	20,8	chunk, competence, fluency, immersion, syllabus
Academic English	AVL	18	75	<u>accuracy</u>, <u>acquisition</u>, <u>activity</u>, <u>approach</u>, chunk, <u>communication</u>, competence, <u>error</u>, <u>form</u>, immersion, <u>input</u>, <u>language</u>, <u>learning</u>, <u>meaning</u>, <u>method</u>, <u>output</u>, syllabus, <u>task</u>
No data found	subject-specific word exclusively	1	4,2	interlanguage
	compound word	1	4,2	feedback
	Total	24	100	

(**Legend:** included in the first 1000 words; **included in both general and academic word lists**)

An analysis of the potential single-word language pedagogical terms in the students' essays shows that 17 of the 24 terms are high frequency general vocabulary items, accounting for 70.9 percent of the terms, in other words almost three quarters of the total. Of these, 13 can be found in the general word lists (NGSL, and/or new-GSL), and an additional 4 are considered high frequency words according to the BNC/COCA. Of these high frequency general words, 10 is included in the most frequent 1,000 general words: *activity*, *approach*, *communication*, *error*, *form*, *input*, *meaning*, *method*, *output*, *task*. This is almost half (41.7%) of all the identified potential terms in the essays.

Of the 24 language pedagogical terms, 18 are included in the Academic Vocabulary List (AVL). This represents 75 percent or three quarters of the potential terms. The first 1,000 words in the AVL include 6 of these words: *accuracy, acquisition, activity, form, method, task*. This is a quarter of the words (25%) identified in the essays.

Only 5 mid-frequency general words were found in our technical vocabulary list: *chunk, competence, fluency, immersion, syllabus*. This represents only one fifth (20.8%) of the potential terms, and I did not identify any low frequency general words among the potential terms. Furthermore, there is only one term, *interlanguage*, which is not included in any of the general and academic word lists. This indicates that, of the potential subject-specific words identified in the essays, the term ‘*interlanguage*’, coined by Larry Selinker (1972) and related closely to second language acquisition research, is the only single-word item in the student’s texts that can be claimed as a term used exclusively in Language Pedagogy. No data was available for one subject-specific word, *feedback*, because it is treated as a compound word by the frequency counters and therefore not included in the frequency counts.

These results show that a significant proportion of the potential technical vocabulary items are high frequency words according to both general and academic vocabulary lists. Indeed, 14 of the identified words (58%) can be found in both general and academic lists. Since such words may carry several different meanings in different contexts and, as a consequence, their role in each context may vary, their precise discipline-specific meaning must be clearly evident from the text in order to be used as language pedagogical terms. It is the fulfilment of this criterion that will make it possible for technical vocabulary items to play a meaningful role in the construction of the knowledge framework in Language Pedagogy. Below I will discuss whether and to what extent this criterion was met in the students’ essays.

Using Technical Vocabulary Items to Develop a Knowledge Framework in Language Pedagogy

The precise identification of discipline-specific concepts, in other words the careful development of terminology, plays a fundamental role in constructing a knowledge framework within a field of study. This function can be achieved through definition, because it enables the writer to ensure that the precise meaning of the terms they use is clarified within the knowledge framework in order to avoid ambiguity, imprecision and, as a consequence, a misinterpretation of ideas by the reader.

In addition to carrying a precise domain-specific meaning, technical terms are also used to create taxonomies. They thus play a role in systematically linking the meaning the terms carry with the meaning of other terms thus placing them in hierarchical categories. The definition and categorisation of specialised terms contribute greatly to the interpretation, within the framework of a discipline, of what is happening in relation to the phenomena that are in the focus of interest. In what follows, I will first look at the use of definitions in the students' essays, and this will be followed by a discussion on taxonomy development.

Clarifying the Meaning of Technical Words in Language Pedagogy: The Definition

I identified a total of 10 definitions in the students' texts. Their distribution by text is summarised in Table 4. The results show that the distribution is uneven: almost half of the essays (n=4) do not contain any definition, three essays contain 1 definition and two essays contain 2 definitions. In the essay with 3 definitions, the writer defined a total of 2 terms, as one term was defined twice in two different parts of the essay.

Table 4

Distribution of definitions in the essays

no definition	1 definition	2 definitions	3 definitions
4 essays	3 essays	2 essays	1 essays

In the essays, students defined 7 terms altogether. Two of these are one-word items (*drill*, *error*), and they are included in my list of potential Language Pedagogy-related terms (see Table 2). In addition, five multi-word technical vocabulary items were also defined in the essays. In each case, one word of the term is included in the list of potential technical vocabulary acting as a modifier within the noun phrase that comprise the term (these words are underlined below): *explicit grammar knowledge*, *implicit grammar knowledge*, *focus on form*, *meaning-focused instruction*, *sequence of acquisition*.

These results indicate that, to some extent at least, students are aware that definitions play an important role in academic discourse. At the same time, however, it is also apparent that they used the opportunity only to limited extent, if at all. For example, a lack of definition of the term 'grammar', which is the central theme of the essays, is striking. This weakens the reader's chances to accurately understand the concept students are referring to within the context of

the texts. An example is shown in extract (1) below, in which the writer focuses on the role of the EFL teacher in the teaching of grammar.

- (1) Teachers do not have to *teach grammar* just monitor the students' work and notice the *errors*, then help their students with some *corrective feedback*.
(Beáta)

In the passage, it is not clear what exactly the author means by *grammar* and the closely related phrase *teach grammar*. The word *errors* in the extract refers to the language product of EFL learners which deviates from the linguistic norm, while *corrective feedback* refers to teaching techniques aimed at improving such language solutions. Although both vocabulary items (i.e. *grammar* and *teach grammar*) could function as relevant and meaningful technical vocabulary in an academic discussion on the acquisition of a target language, extract (1) above takes the two items out of the scope of their potential discipline-specific meaning without offering an alternative definition. The writer of the text may assume that their meaning is understood, and no definition is necessary. In the academic context of Language Pedagogy, however, this has the opposite effect: it makes the text imprecise and vague, because the nouns *grammar* and *errors* are also high frequency general words.

Ambiguity caused by a lack of definition is also apparent in extract (2).

- (2) Grammar teaching I think can be done most effectively if it uses as many *methods* as possible. (Tímea)

Here, an interpretation problem may arise because the context does not make it clear in what sense the author uses the noun *methods*. In a general sense, the word refers to procedures or techniques employed to achieve a particular goal. In the case of Language Pedagogy, however, *method* can function as a technical word referring to a systematic and coherent set of procedures which are grounded in systematically defined principles of language and language learning, and which are designed accordingly in order to support the teaching and learning of foreign languages in the most effective way (e.g. Grammar-Translation Method, Audio-Lingual Method). The precise understanding of the message in extract (2) is dependent on the sense in which the word *methods* is used by the writer. The exact meaning, however, is not apparent in this context, and no definition is offered to resolve the ambiguity.

Despite the limited use of definitions, the results also show that some of the definitions in the essays do serve the purpose of clarifying the meaning of the terms. This is the case in extract (3) where definitions are provided for two

closely related terms (i.e. *explicit [grammar] knowledge* and *implicit [grammar] knowledge*), indicating the relationship between the two meanings as well.

- (3) This way learners have a wide range of *explicit knowledge* that cannot be used automatically and unconsciously ... [Explicit knowledge] facilitates the development of *implicit knowledge* – which can be used unconsciously. (Tímea)

There are also examples, however, where the primary role of definitions is to demonstrate that the essay writer is aware of the meaning of the terms, rather than to provide a framework of knowledge for the discussion put forward in the text.

- (4) Students need to get the interlanguage by *implicit grammar knowledge*. *Implicit grammar knowledge* is when they do not have to think about the grammatical rules but it comes to their mind naturally. (Beáta)

- (5) There are several useful methods for language teaching. The *drill* is very common amongst them. This means that the teacher says a sentence or a word and the students have to repeat it. (Borbála)

In both extracts (4) and (5), the definition is preceded by a statement in which the writer relates the meaning of the term to other meanings, where the focus lies on the interpretation and explanation of processes in language learning and teaching. Since the definition follows rather than precedes the discussion of relevant phenomena, the result is an uneven text with a lesser degree of coherence. At the same time, looking at the sequencing of content from a rhetorical point of view, the texts achieve a kind of knowledge-demonstrating effect, showing explicitly that the writers are aware of the meaning of the terms they are using in the discourse.

CLASSIFYING LANGUAGE PEDAGOGICAL TERMS: THE TAXONOMY

An attempt to classify terms according to their meaning relationships is clearly visible in the essays. This is demonstrated by the frequent use of multi-word technical vocabulary. In total, I identified 20 multi-word terms in the essays (see Table 5). All of these contain at least one word that is defined in the Longman Dictionary of Language Teaching and Applied Linguistics (2010)

(see Table 2). The presence of multi-word terms in the essays is a clear indication of the students' familiarity with a number of the concepts relevant to the teaching of grammar in EFL as well as the interrelatedness of these concepts.

Table 5

Multi-word technical vocabulary items in the students' essays

communicative competence	distributed grammar teaching	form-focused instruction	massed grammar teaching
communicative task	explicit grammar knowledge	grammatical form	meaning-focused instruction
corrective feedback	first language acquisition	grammatical input	second language acquisition
course book syllabus	focus on form	implicit grammar knowledge	sequence of acquisition
deductive grammar instruction	focus on meaning	inductive grammar instruction	writing task

Specialised terms consisting of more than one word may be suitable for indicating the taxonomic position of the term without the mention of other related terms. In the essays, examples include the noun phrases *corrective feedback* and *grammatical input*, where the pre-modifiers *corrective* and *grammatical* indicate that the concepts denoted by the multi-word terms belong in subclasses of a higher taxonomic level indicated by the headwords *feedback* and *input* respectively. I also found examples of terms appearing in association with other terms, thus facilitating the understanding of their position according to a hierarchical classification as well as the meaning they carry in relation to each other. Related terms that appear together in the essays are as follows: *deductive grammar instruction* and *inductive grammar instruction*, *explicit grammar knowledge* and *implicit grammar knowledge*, *first language acquisition* and *second language acquisition*.

An analysis of semantic relations between the potential technical words shows that, in addition to the use of hypernymy and hyponymy, students applied the tool of synonymy and part-whole relations to indicate the taxonomic relations between Language Pedagogy-related concepts. Below I will present my findings focusing on the use of one potential technical word, *method*. The noun *method* can be found in every essay, but in many cases it is not clear whether the writers use it in the discipline-specific sense given in the Longman dictionary (2010), or in a broader, more general sense. The findings indicate that the students'

establishment of semantic relations between technical words does not always support the precise development of a taxonomy. This is the case, for example, in extract (6).

- (6) There are several *possibilities, methods* supporting grammar instruction. My personal favourite is the *focus on form*. (Kitti)

In the first sentence of the extract, the writer may use the word *method* as a synonym for *possibilities* for stylistic reasons. It is equally possible, however, that the aim is to narrow and specify the broad meaning of *possibilities*. Since the term *focus on form* in the second sentence does not denote a specific English language teaching method, the noun *methods* cannot be understood as a Language Pedagogy-related term. Therefore, it is not clear exactly what narrower meaning *methods* carries, and how exactly the hyponymy indicated between the noun *methods* and *focus on form* serves the development of a taxonomy.

Another example can be found in extract (7).

- (7) There are several existing *ways* of grammar teaching and each has its own drawbacks and benefits. But luckily we are not obliged to follow just one *method*. (Hajnalka)

Here the nouns *ways* and *method* may also be interpreted as synonyms. In this case, the writer's aim may be a stylistic one in order to avoid word repetition. Alternatively, however, the noun *method* may also be understood as a language pedagogical term. This changes the message of the text, because the discipline-specific meaning of the word places the teaching of grammar in a system of systematically developed procedures, i.e. methods, for teaching foreign languages, based on well-defined theoretical principles. In this case, from a semantic point of view, a part-whole relation is established, where the procedures for teaching grammar are part of individual language teaching methods. However, this line of thought would need to be clearly indicated in the text in order to exploit the Language Pedagogy-related meaning potential of the part-whole relation.

In extract (8), the use of synonymy hinders the precise development of taxonomic relations. The nouns *instruction* and *method* are used as synonyms in the sentence, each functioning as headwords in an extended noun phrase. The synonymy implied in the extract fails to convey the technical meaning these nouns may have, because the clear distinction made, in the discipline, between the practice of actual classroom teaching (i.e. *instruction*) and the procedures underlying it (i.e. *method*) is blurred here.

- (8) Meaning-focused *instruction* is the opposite of the form-focused *method*. (Borbála)

Hyponymy applied in extracts (9) and (10) classifies terms into categories in an incorrect way.

- (9) The *method* which is the most commonly used one is the *PPP*. (Györgyi)
- (10) There are several useful *methods* for language teaching. The *drill* is very common amongst them. ... In my opinion, this kind of *activity* is very useful. (Borbála)

Given that taxonomies comprise hierarchically and systematically ordered technical terms, the lesson structure *PPP* (i.e. *Presentation Practice Production*) mentioned in extract 9 is not a hyponym of the term *method* in Language Pedagogy. Similar is the case in extract 10 in terms of the relationship between *methods* and *drill*, because the term *method* is not a hypernym of *drill* in the Language Pedagogy-related sense implied in the text. This is because *drill* is not a language teaching method, but refers to a type of technique used in language teaching. The classification in extract 10 is further obscured by use of the phrase *this kind of activity* in the third sentence, because the writer's use of *methods* and *activity* as synonyms inaccurately places the two terms in the same taxonomic category.

In interpreting extracts 6-10 above, the reader may choose to regard the noun *method* as a general or a general-academic word rather than a technical word. In this case, however, the possibility of a consistent and hierarchical classification, which is a characteristic feature of discipline-specific texts, is not realised. Indeed, any method of application related to any aspect or level of EFL teaching may be included in the category of *method*. The construction of a relational system of meanings is thus compromised, the taxonomy becomes oversimplified, does not fulfil its function in discipline-specific discourse and may easily lead to misunderstandings in terms of interpretation. Consequently, the text fails to effectively fulfil its informative, ideational function.

CONCLUSION

In this paper, I investigated the occurrence, characteristics and function of Language Pedagogical terms in the essays of a group of L1 Hungarian MA TEFL students. Below I summarise the answers to the research questions and discuss

the implications that can be drawn from the findings. I also suggest future research directions, taking into account the limitations of the present research.

The first research question focused on words in the students' essays which have the potential to serve as technical vocabulary in Language Pedagogy. In total, 24 potential single-word terms were identified. These are vocabulary items that have a precisely defined conventionally accepted meaning in the field, and are, therefore, capable of carrying exact discipline-specific meaning within the context of the students' essays. In addition, 20 multi-word technical vocabulary items were also found in the texts. Here at least one words of each multi-word items is recognised as a term in Language Pedagogy. These results indicate that the vocabulary of the essays has the potential to help fulfil the informative and interpretative roles of academic text. Students can fully realise this potential by exploiting the discipline-specific meaning of the vocabulary items in their academic writing.

The second research question focused on the frequency of the identified potential technical words in general and academic word lists. The analysis shows that three quarters of the potential terms identified in the essays are both high frequency general words and high frequency academic words. This result confirms that Language Pedagogy is one of the disciplines where words with a precise subject-specific meaning are not used in the given field only. Indeed, most of the potential technical words I identified in the essays (e.g. *communication*, *drill*, *input*) are also high-frequency general words with multiple meanings in different contexts while also fulfilling a general-academic function in other disciplines. Furthermore, some potential terms also have a discipline-specific meaning in fields other Language Pedagogy (e.g. *communication* in Media Studies; *drill* in Military Science; *input* in Computer Science). These findings emphasise that it is essential for novice writers to clearly indicate the precise meaning of technical words in their essays in order to fully exploit the discipline-specific meaning potential of the terms they use.

The third research question investigated whether and to what extent the identified vocabulary items performed the role of technical vocabulary in the students' essays. Results indicate that, to varying degrees and with varying effectiveness, this role was fulfilled in the essays in the form of definitions and a classification of terms. This indicates that, to some extent, the participants are aware of the role terms play in discipline-specific discourse and make an effort to ensure that these functions are realised in the essays.

My research revealed some weaknesses in terms of technical vocabulary use in the essays. One of them is that students did not necessarily apply the function of definition, or they used it for purposed other than the development of a knowledge framework. This finding may be explained by the fact that the

students prepared their texts with the reader in mind, i.e. the subject teacher assessing their essays, and presumably acting on the assumption that the reader was aware of the discipline-specific meaning of the vocabulary items anyway. Therefore, the inclusion of a definition was either unnecessary, or was needed in order to demonstrate the writer's awareness of the technical meaning of the words. At the same time, however, this finding may also suggest that students did not attempt to define relevant vocabulary items because they were not always sure of the exact Language Pedagogy-related meaning of the terms. Considering that a misdefinition of terms may affect the teacher's evaluation of the essays, the absence or presence of definitions in the text can be understood as an implicit rhetorical device for persuasion.

Another weakness relates to taxonomy construction. The attempts to group and classify terms often resulted in vague, imprecise and broad categories and the establishment of imprecise interrelationships between the meanings of technical words. In some cases, potential technical terms were used in a broader, incorrect or non-specific sense thus hindering the precise definition, and grouping, as well as an identification and interpretation of the relationships between phenomena and ideas in Language Pedagogy. Here the source of the problem is that the exact discipline-specific meaning of the potential technical words was not clearly indicated in the texts. This finding suggests that the students had difficulty in categorising and classifying the language pedagogical terms, and their inconsistent and vague establishment of semantic relations between technical words did not support the precise development of a reliable taxonomy.

A pedagogical implication of the results is that it is important for students to gain a deeper understanding of the precise meaning and function of technical vocabulary in Language Pedagogy-related academic texts. In particular, it is crucial that students become more aware (1) that a particular word may have different meanings in different general and discipline-specific contexts, (2) that there is a particular relationship between the meaning of these words and their function in any given context, and (3) that definition and taxonomy development are two powerful techniques for ensuring that a particular word performs the role of technical vocabulary in discipline-specific writing. It would also be important for students to clearly see why and how the imprecise selection and context-inappropriate use of words weakens the informative and interpretative role of discipline-specific texts. These objectives may be achieved with the help of in-class analysis of existing good practices supplementing them with targeted text production exercises. This type of classroom practice needs to be grounded in the principle that discipline-specific knowledge and discipline-specific communication are inseparable areas, mutually dependent on each other. It is,

therefore, recommended that their acquisition be treated as an integral part of Language Pedagogy by including the development of competencies for effective Language Pedagogy-related communication in the context of subject courses.

Limitations of the present study include that the empirical research was based on a small corpus in a cross-sectional study, and that it focused on text analysis only. Therefore, it would be useful to investigate, using a larger corpus within the framework of a longitudinal study, the use of technical vocabulary in Language Pedagogy-related essays, taking into consideration the students' experience and opinions regarding academic writing as well, and seeing how text quality and student attitudes change over time with the help of targeted classroom work.

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