THE TREATMENT OF LEXICAL COLLOCATIONS IN EFL COURSEBOOKS IN THE ESTONIAN SECONDARY SCHOOL CONTEXT

Liina Vassiljev, Liljana Skopinskaja, Suliko Liiv

Abstract. The article investigates lexical collocations encountered in English as a foreign language (EFL) instruction in Estonian upper secondary schools. This is achieved through a statistical analysis of collocations featuring in three coursebooks where the collocations found are analysed in terms of their type, frequency and usefulness index by studying them through an online language corpus (Collins Wordbanks Online). The coursebooks are systematically compared and contrasted relying upon the data gathered. The results of the study reveal that the frequency and range of lexical collocations in a language corpus have not been regarded as an essential criterion for their selection and practice by any of the coursebook authors under discussion.

Keywords: coursebook evaluation, corpus analysis, lexical collocation, EFL instruction, Estonian secondary school level

1. Introduction

Effective communication in a foreign language (FL) requires, among other aspects, a vast repertoire of lexical knowledge which does not refer to the broad knowledge of single words but rather to the company these words keep, as proposed by Firth (1968: 179): “You shall know a word by the company it keeps.” Collocations, as a type of frequently co-occurring, pre-fabricated items, help learners to achieve native-like command and fluency in a FL, and their significance as a useful input material should be acknowledged in the classroom in terms of teaching materials’ design and employment.
1.1. Key concepts used in the research

The availability of corpus analyses of spoken and written texts has provided us with
the evidence of lexical patterning in language output (Moon 1998: 81, O'Keefe et
al. 2007: 60–61), and Bengt Altenberg (1998: 102) has even suggested that over
80% of “words in the corpus form part of recurrent word-combinations in one
form or the other.”

Over 50 different terms have been offered to describe formulaicity, such as
chunks, collocations, fixed expressions, formulae, multi-word items, ready-made
expressions, and semi-preconstructed phrases that constitute single choices (Wray
2005: 9). Despite the diversity of formulaic sequences, some basic criteria, such
as institutionalisation, fixedness, non-compositionality, and frequency of occur-
rence (in a corpus) may be indicated (Schmitt, Carter 2004: 3). According to Nadja
Nesselhauf (2005: 1), collocations, as arbitrarily restricted lexeme combinations,
form one type of recurrent word combinations. From an instructional point of view,
which is the focus of the current study, it makes sense to regard collocations as items
which frequently occur together and have some degree of semantic unpredictability
(Nation 2001: 317).

The notion of collocation was first taken up by Harold E. Palmer (1933: 4), who
defined it as a succession of two or more words whose meaning is not obvious from
its component parts, and must thus be learnt “as an integral whole or independent
entity.” Notwithstanding the importance of Palmer’s contribution, theoretical
prominence to the notion was given by J. R. Firth (1957: 194–195) who brought
forward the technical term “meaning by collocation”, calling attention to the envi-
ronment of a word in determining its meaning, and claiming that the co-occurring
words determine in part the meaning of a particular word. The decades following
Firth’s work up to the present have witnessed a great number of descriptive studies
examining the nature of collocations in linguistics, lexicography, corpus linguistics,
pedagogy, and translation studies (Krishnamurthy 2006: 598) which, however, has
resulted in a lack of precision while defining the concept (Bahns 1993: 57, van den

Despite the variety of interpretations, two main perspectives on clarifying the
notion may be outlined: a purely statistical approach and a more linguistically
motivated approach (Seretan 2011: 10–17). The advocates of the former view the
notion as a statistical phenomenon of word co-occurrence, describing it in terms of
corpus analysis and frequency counts (Halliday 1994, Halliday 2002, Sinclair 1991,
Sinclair 1997). Based upon a large-scale frequency count into the study of lexis and
collocation (The OST Report 1970), Sinclair (1991: 110) maintains that two dia-
metrically opposed models of interpretation are needed to understand the relation-
ship between meaning and language text: the open-choice principle and the idiom
principle. The former conveys the view of the connection between a language text
and a broad range of choices regulated by grammar, while the latter acknowledges
the importance of semi-preconstructed phrases as single choices. Contrary to the
purely statistical approach, the proponents of a linguistically motivated approach
do not exclusively view collocation as a frequent association of words, but rather as
a syntactically bound combination (Halliday, Hasan 1976, Howarth 1998, Mel’chuk
1998, Nesselhauf 2005). For the purposes of the present research, the statistical
approach has been adopted, where collocation is regarded as an example of the idiom principle, that is, as an instance where “words appear to be chosen in pairs or groups and these are not necessarily adjacent” (Sinclair 1997: 115). Collocation is thus viewed as “the occurrence of two or more words within a short space of each other in a text” (Sinclair 1997: 170).

1.2. Pedagogical implications for learning/teaching collocations in EFL instruction

Considering the role of collocational knowledge in EFL instruction, a range of arguments have been put forward to justify the incorporation of collocations in teaching materials (Hill 2000: 53–56, Nation 2001: 318–328).

- Collocational knowledge is the essence of language knowledge, as language knowledge and use are based on associations between sequentially observed language items.
- Fluent language use requires collocational knowledge, since naturally occurring text is to a large extent made up of prefabricated language.
- The use of collocations exemplifies the non-arbitrary nature and predictable patterning of the lexicon.
- Collocational knowledge facilitates learners’ thinking, memorisation, and expression of complex ideas.

This proves that collocational knowledge is a vital tool for EFL learners to achieve native-like fluency and confidence while communicating meaning. However, the results of a considerable amount of studies on non-native speakers’ command of collocations in written discourse (Howarth 1998, Siyanova, Schmitt 2008, Laufer, Waldman 2011) point to major challenges students experience, especially in the use of common and uncommon collocations, as well as high-frequency and medium-frequency collocations (Siyanova, Schmitt 2008). Apart from Mark Koprowski’s (2005) study of lexical phrases as featured in the three EFL coursebooks conducted on the basis of large-scale corpora, not much research has been done into the treatment of lexical collocations in teaching materials in terms of their amount and usefulness.

In view of the lack of studies on this topic in Estonia, there is a need for research into the treatment of collocations in EFL coursebooks currently utilised in Estonian upper-secondary school education in order to achieve a fundamental change in the methodological position of collocations, giving them “the same status as the other aspects of language – pronunciation, intonation, stress and grammar” (Hill 2000: 59).

Based on Morton Benson et al. (1997: ix) distinction between grammatical collocations and lexical collocations, the current study focuses exclusively on the latter, which are viewed as having the following structures: verb + noun, adjective + noun, noun + verb, noun + noun, adverb + adjective, verb + adverb, and verb + adjective.

In addition, the research relies upon Ute Roemer’s (2008: 113–118) classification of pedagogical corpus applications into direct and indirect corpus applications, where direct corpus applications focus on teacher/learner-based analysis of corpora for data-driven learning purposes and indirect corpus applications provide
descriptive information about a language for the evaluation and design of teaching materials and syllabi. It is the latter type of pedagogical applications which is employed here.

The present study aims to establish the relevance of lexical collocations in EFL coursebooks currently utilised at upper secondary school level in Estonia in terms of the amount and usefulness of lexical collocations featuring in collocation exercises and other vocabulary-related tasks.

2. Research material and methods

Prior to coursebook evaluation, a small-scale online survey was undertaken among 40 upper-secondary school level teachers in Estonia to find out the most frequently used teaching materials in Form 12. The participants were required to rate the amount of collocation exercises as well as the selection of lexical collocations (in terms of frequency and range of their occurrence) in the exercises of the coursebooks employed on the scale of 1–5, where 1 stands for a negligible amount/random selection, and 5 for a considerable amount/careful selection of the collocations. The three most frequently used coursebooks were selected for the purposes of the study: *Upstream Advanced Student’s Book* (2003), *Advanced Expert CAE Coursebook* (2005), and *Mission 1 Coursebook* (1996). These titles are henceforth abbreviated as *UA*, *AE*, and *M1*.

In order to examine the amount and usefulness of lexical collocations found in the aforementioned coursebooks, the following steps were followed.

First, the number of overall vocabulary-related exercises (VRE) was counted and compared to that of collocation exercises (CE). VRE in Vocabulary/Language Focus sections, English in Use, Reading, Listening and Writing sections of the coursebooks were explored to determine whether the exercises contained any collocational input via word lists, phrases, etc. in, for example, matching tasks. An exercise was qualified as a CE only if it used the word “collocation” in its instruction or headline. The comparison between the total number of VRE and that of CE exemplifies the coursebook designers’ general attitude towards the notion – whether lexical collocations are deemed as an essential or a relatively neglected aspect of vocabulary practice.

Second, the total amount of lexical items in VRE and CE was compared to that of lexical collocations in CE, and to the number of lexical collocations in the other VRE. This comparison gives some insight into the authors’ overall approach towards collocations: if a VRE includes, for example, a multiple-choice selection of vocabulary items, then all the items have been counted and checked, albeit disregarding their definitions.

In order to ascertain whether a lexical item in VRE could be regarded as a lexical collocation, its occurrence was checked in each exercise by means of the *Oxford Collocation Dictionary for Students of English (OCD)* (CD-ROM version), which is based on the 100 million word British National Corpus (McIntosh et al. 2009: viii). If both the word under scrutiny (i.e. node according to Sinclair (1991: 115–116)) and the other word that occurs in the specified environment (i.e. collocate according to Sinclair (1991: 115–116)) have been included in the *OCD*, then the collocation undergoes statistical analysis.
The usefulness of lexical collocations in CE and VRE of the three coursebooks was analysed according to the adapted research model of Mark Koprowski (2005: 323). Koprowski suggests implementing frequency and range as the measures of the usefulness of vocabulary, which is consistent with the views of other scholars (McCarthy 1990: 69, Verghese 2007: 86, Boers, Lindstromberg 2008: 10, Granger 2009: 134). The usefulness score is derived from both frequency (i.e. the number of times an item occurs per million words in a computerised corpus) and range (i.e. the analysis of the five most common sub-corpora where the item has been found (Koprowski 2005: 324)). The usefulness score is the arithmetic mean of the frequency scores of the lexical item in the five sub-corpora.

The usefulness of lexical collocations derived from CE and other VRE was calculated according to t-scores of the collocations found in the Collins Wordbanks Online corpus, which was chosen from the variety of available language and learner corpora (Kitsnik 2006, Eslon, Metslang 2007) for two reasons: its adherence to the ideas of the Lexical Approach (Lewis 2000), which stresses the role of lexical, including collocational, input in EFL teaching, and its free accessibility at the time of the research.

Since range has been regarded as another crucial element for the selection of language input for EFL learners, four sub-corpora (with a total of 308,351,602 tokens) within the Collins Wordbanks Online corpus were created:

- Books (fiction and non-fiction) with a total of 152,400,529 tokens.
- News with a total of 83,928,217 tokens.
- Spoken language with a total of 61,527,354 tokens.
- Magazines, ephemera (i.e., any transitory written/printed matter not meant to be preserved, e.g. posters, etc) with a total of 40,495,502 token.

The minimum frequency of the collocation in the corpus is set to 5 and the minimum frequency in a given range is 3. In other words, a collocation under investigation must occur at least 5 times in the total corpus and at least 3 times in the chosen sub-corporus. Using this measure of statistical significance, t-scores were computed from the four sub-corpora for each lexical collocation found in the CE and VRE of the three coursebooks, and the arithmetic means of the t-scores were calculated to record a usefulness score for each lexical collocation.

The usefulness score, i.e. the average t-score for the four sub-corpora, can range from 0 to over 40, where 0 stands for a particular lexical collocation occurring less than 3 times in the given sub-corporus and less than 5 times in the total corpora. The usefulness scores of lexical collocations were compared and analysed according to the type of lexical collocations (as classified in Benson et al. 1997) as well as among the three coursebooks to give a better insight into the coursebook authors’ procedures for selecting collocational input.
3. Results and discussion

In order to investigate the amount and usefulness of lexical collocations featuring in UA, AE, and M1, two studies were conducted. First, an analysis of the amount and type of collocations found in CE and VRE of the selected coursebooks was undertaken, and second, the usefulness scores (in terms of frequency and range) of the employed lexical collocations in the three coursebooks were calculated, compared and contrasted.

3.1. Analysis of the amount and type of lexical collocations

The counting of the total amount of VRE (including collocation exercises) in the Vocabulary/Language Focus, English in Use, Reading, Listening, Speaking and Writing sections reveals that quite different emphasis has generally been placed on the vocabulary input in the three coursebooks. UA and M1 contain almost twice as many VRE (188 in both) as AE (99). It may be argued that it is the number of CE, as compared to that of VRE, that offers the most comprehensive overview of the coursebook authors’ attitude towards the notion. However, only 8% (15) of the VRE in UA, 6% (6) in AE, and 0% (0) in M1 comprise specific CE, clearly indicating that collocational practice forms a minor part in the overall vocabulary training provided in these coursebooks. Moreover, the considerable difference between the amount of CE in the three coursebooks gives some insight into the overall treatment of collocations. Thus, five units out of the total of ten in UA contain one CE, and five units out of ten include two CE. In AE, four units out of ten modules have one CE, one module comprises two CE, and five modules do not employ any collocational focus. In the case of M1, which lacks any specific CE, it is the responsibility of a teacher to highlight the concept for the learners, as “collocation is mostly a matter of noticing and recording” (Woolard 2000: 35). However, M1 provides a greater amount of collocational input in the VRE than the other two coursebooks (see Figure 1).

![Figure 1](image_url)  
**Figure 1.** The comparison of the overall amount of lexical collocations in CE and in the other VRE

For a more detailed overview of the importance attached to lexical collocations, the total amount of lexical items in the VRE (including CE) has been compared with the number of lexical collocations in the CE and VRE (see Figure 2).
The comparison of the coursebooks based on the total amount of lexical items in the VRE (inc. CE), the numbers of lexical collocations in the CE and the other VRE.

The results show that UA contains the greatest number of lexical items in the VRE (2975), followed by M1 (2326), while the smallest amount is present in AE (1704). The comparison between the three coursebooks indicates that collocational practice does not form a substantial language learning element “from lesson one” as suggested by Hill (2000: 60), this meaning that a vast proportion of lexical items presented in the coursebooks are being introduced as single words following the traditional concept of the word as the unit of meaning (Sinclair 1991).

As M1 does not contain any CE, the amounts of lexical collocations per type in CE have been counted and compared for UA and AE only (see Figure 3).

Out of the total of 221 lexical collocations found in the CE of UA, 114 are of the type adjective + noun, 59 of verb + noun, 47 of noun + noun, and 1 of adverb + adjective. Out of the total of 72 lexical collocations encountered in the CE of AE, 33 are of the type of adjective + noun, 23 of verb + noun, 13 of adverb + adjective, and 3 of noun + noun.
Figure 3 shows, therefore, that UA contains almost three times more lexical collocations (221) in the CE than does AE (72), which is consistent with the overall number of collocational practice afforded in these coursebooks. There is almost three times less collocational training included in AE (6 CE) than in UA (15 CE). In terms of the types of lexical collocations, the type of adjective + noun prevails in both CE and VRE in UA. This type has been presented twice as often as that of verb + noun in the CE of this book.

The amounts of lexical collocations per type in the VRE (see Figure 4) indicate that the most common type in UA is that of adjective + noun (111), followed by verb + noun (102) and noun + noun (32). The largest number of collocations in the VRE of AE is that of verb + noun (80), followed by adjective + noun (61) and adverb + adjective (50).

As to the overall number of lexical collocations found in both CE and VRE (see Figure 5), the total amount of lexical collocations in UA is 503, compared to 293 in AE and 325 in M1. The most typical types of collocations employed in the exercises of UA are those of adjective + noun (225), verb + noun (161), and noun + noun (79). In AE, the most widespread types are verb + noun (103), adjective + noun (94), and adverb + adjective (63). The types of verb + noun (170), adjective + noun (88) and noun + noun (43) are the most recurrent ones in M1.
As can be seen from the analysis of the amount and types of lexical collocations in the three coursebooks, their authors have made different decisions about the variety of collocation types to be incorporated in the study material. UA has the highest amount of collocation exercises among the selected coursebooks. Moreover, most of the information provided regarding different types of collocations is also found in the exercises of UA. Much less data of this type is to be found in AE and M1. Ideally, a coursebook should naturally offer varied collocational practice in the EFL classroom.

### 3.2. Analysis of the usefulness scores of lexical collocations

The amount of lexical collocations in the aforementioned coursebooks indicates the quantity of their input, yet the quality of their selection and treatment is assessed by means of usefulness scores using the Collins Wordbanks Online corpus.

When comparing the proportion of different usefulness scores for the lexical collocations in the coursebooks (Figure 6), it can be seen that AE includes the greatest proportion of lexical collocations (11%) with the lowest usefulness score (0), which means that these collocations occur extremely rarely in the four sub-corpora created for the purposes of the current study. 11% of the lexical collocations in the CE and VRE of AE, 8% of UA and 5% of M1 score that low on the usefulness measurement. In terms of the actual amount of lexical collocations with the lowest score of 0, the numbers for UA, AE, and M1 are 40, 32 and 16 respectively.
Introducing lexical collocations with the lowest usefulness score, such as a vicious satire/headache, a nondescript suburban house/grey suit, an acknowledged comedy/story found in the CE of AE, or a delightful/quaint building, a pristine/littered coastline (of the type of adjective + noun) encountered in the CE of UA, or to utter a name/sound, to contract malaria/hepatitis (of the type of verb + noun) taught in AE can be rather unhelpful for the learner. The fact that such lexical collocations have been included in the CE, i.e. in the exercises that should provide excellent input about lexical collocations in terms of their usefulness and range, raises questions about the general criteria used in selecting the teaching materials. One cannot but agree with Sylviane Granger (2009: 134) that too much valuable teaching time “is wasted on words and phrases that are not even worth bringing to learners’ attention for receptive purposes, let alone for productive purposes”.

When examining the proportion of lexical collocations with usefulness scores from 0.001–5.000, the CE and VRE of UA and AE have slightly more of such cases than does M1. However, collocations of such a low usefulness score (e.g. government endorsement) are rather infrequent in terms of their occurrences in large corpora, and their inclusion in the study materials at upper secondary level does not seem reasonable.

As regards the percentage of lexical collocations with usefulness scores ranging from 5.001 to over 20 (which may be regarded as a good score for the selected collocational material), M1 leads the way at 59%, followed by UA at 49% and AE at 47%. Some examples are: basic facts (5.001–10.000), harmful effects (10.001–15.000), a major concern (15.000–20.000), face a problem (20.001...).

M1 seems to be the best in its selection of the collocational input, having the lowest amount of items with low usefulness scores (5%), and the highest number of collocations with higher usefulness scores (59%). Yet M1 has no collocation-focused

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**Figure 6.** The comparison of lexical collocations found in CE and the other VRE of UA, AE and M1 according to their usefulness score values in percentages.

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<th>Advanced Expert CAE Coursebook (293)</th>
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exercises, which is a serious drawback concerning its overall attitude to the notion of collocations.

AE offers the poorest coverage of lexical collocations, containing the lowest amount of lexical collocations in the CE and VRE, with only six activities focusing on collocations (CE) and the highest proportion of infrequent lexical collocations with the usefulness score of 0 (11%).

Since UA has the greatest amount of lexical collocations in the CE and VRE, containing one or two activities in each unit, it may be argued that its users obtain more information about lexical collocations than those of AE and M1.

In summary, the analysis of the usefulness scores of the lexical collocations encountered in the three coursebooks reveals that, in general, the notion of collocations has not received close attention by any of the coursebook authors under discussion. However, this is merely an analysis of the treatment of lexical collocations in three coursebooks, in other words, an observation into how often the collocational input is provided, how useful it is, and how often a lexical item has been described by “the company it keeps” (Firth 1968: 179). It does not give any insight into the actual processes of teaching/learning in the classroom.

4. Conclusion

The present study has focused on the treatment of lexical collocations, i.e. collocations consisting of noun, adjective, verb and adverb, in the three EFL coursebooks currently employed in Form 12 of Estonian upper-secondary schools: *Upstream Advanced Student’s Book, Advanced Expert CAE Coursebook*, and *Mission 1 Coursebook*.

The treatment of lexical collocations refers here to the study of the amount and usefulness of lexical collocations that have been selected from the aforementioned coursebooks. In order to analyse the amount of lexical collocations, all their instances have been counted, in collocation exercises as well as in the other vocabulary-related exercises, and then compared among the coursebooks. For determining whether a lexical combination may be regarded as a lexical collocation, *Oxford Collocation Dictionary for Learners of English* has been consulted.

The usefulness of lexical collocations has been calculated according to t-scores of the collocations in the four sub-corpora of Collins WordBanks Online corpus. The usefulness scores of lexical collocations have been compared and analysed by type among the three coursebooks to give a better insight into the general selection policies of the collocational input by the coursebook authors.

The selection reveals the coursebook designers’ general attitude towards the notion of collocation – whether collocational knowledge is deemed as rendering substantial assistance for the achievement of native-like fluency and command of the target language, or whether collocations are regarded as a peripheral aspect of vocabulary practice.

The research has shown that lexical collocations are neglected rather than central in these textbooks, and their selection in terms of frequency and usefulness value is quite random. Although *Upstream Advanced* contains a considerably higher number of collocation exercises (15) than *Advanced Expert* (6) and *Mission*
1 (o), as well as that of lexical collocations, in general (503, 293, 325 for *Upstream Advanced, Advanced Express*, and *Mission 1* respectively), it may be argued that it is the word rather than the lexical collocation that is deemed the unit of meaning by the authors of all three coursebooks.

It has to be admitted, however, that the present study concerns only the exercises, and not the texts featuring in these coursebooks. Hence, further research is needed in this area.

Since these coursebooks are in current use in the EFL classroom in Estonia, the findings, though conflicting, should prove useful for both teachers and learners employing the same textbooks, but most of all, for coursebook designers.

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LEKSIKAALSETE KOLLOKATSIOONIDE KÄSITLEMINE INGLISE KEELE KUI VÕÕRKEELE ÕPIKUTES Eesti keskkooli kontekstis

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Võtmesõnad: õpiku analüüs, korpusanalüüs, leksikaalne kollokatsioon, inglise keel kui võõrkeel, keskkooliaste