Abstract

The importance of teaching ESP to students not majoring in English is discussed. The role of vocabulary learning in ESP is emphasized. The article attempts to add an insight to Georgian experience of teaching English to students of Agriculture to the existing studies on the use of vocabulary learning strategies in ESP. The students should become aware of the importance of language learning strategies and get trained to use them appropriately. The purpose of this study was to investigate the attitude of students towards vocabulary learning methods offered by the textbook and the teacher, as well as the awareness of and the preferred vocabulary teaching /learning strategies among Agriculture University students while they were taking an English for Specific Purpose (ESP) course. Respondents comprised 107 students at Agriculture University of Georgia students. An ESP vocabulary learning questionnaire was administered to the randomly selected students who enrolled in the English for Agriculture as a requirement. It revealed that students are not sufficiently satisfied with the existing state of teaching ESP vocabulary. A conclusion has been made that vocabulary learning strategies have to be purposefully taught, to improve the existing situation.

Keywords: English for specific purposes (ESP), vocabulary teaching / learning strategies, vocabulary memorization, vocabulary meaning elicitation

Introduction

As international communication is becoming more accessible and faster, English for Specific Purposes (ESP) has become an essential branch in English language teaching. Professionals increasingly demand ESP programs to match the development in their own field. Researchers have conducted studies to determine effective teaching
approaches and learning strategies for ESP learners. Jones and Durrant (2010) have indicated that the greatest obstacle for acquiring a second language is students’ limited vocabulary size.

ESP vocabulary always presents a major linguistic obstacle to non-native English-speaking students. Consequently, effective ESP vocabulary teaching plays a crucial role in successfully implementing ESP programs. Nonetheless, ESP vocabulary teaching has been a neglected area in ESP research during previous decades. Researchers (Dudley Evans & St John, 1998) and teachers have focused less attention on it than on syntax and phonology. Although ESP vocabulary does not receive as much attention as language specialists suggest, numerous ESP practitioners have advocated the learning of lexical items according to semantic systems (Robinson, 1991). Alber-Dewolf (1984) suggested that a sound knowledge of term-formation processes improves the reading skills required for reading a foreign language for specific purposes.

Vocabulary acquisition is a long-term process, requiring much work. Although some students spend a lot of time on trying to increase their lexicon: to memorize words and collocations for the purposes of oral and written communication, and to understand the vocabulary while listening and reading - the results are still quite poor. One of the reasons is applying ineffective strategies of vocabulary learning. Noles and Dole (2004, p. 179) state: researchers have collected much evidence that supports explicit strategy instruction. The teaching of strategies empowers readers, particularly those who struggle, by giving them the tools they need to construct meaning from text. Instead of blaming comprehension problems on students’ own innate abilities, for which they see no solution, explicit strategy instruction helps students to take control of their own learning and comprehension.

Vocabulary learning is a very important part of the curricula at Agriculture University of Georgia and the students who study here need to learn English for different purposes: to deal with the foreign business partners in their jobs, to use it for their studies, to travel abroad to meet other cultures or on holiday, to read professional literature in English, etc. In this study, effective ESP vocabulary teaching and learning strategies were investigated.

Statement of the Problem

Although ESP courses, alongside the core courses in the programs of Agriculture, are viewed as very important for gaining professional competence, most of Agriculture University students feel frustrated by the existing ESP courses because of their limited vocabulary size. It is a challenge to motivate them to use correct spellings and accurate pronunciation regarding ESP vocabulary. It is even a greater challenge to motivate them read special texts due to lack of vocabulary stock and guessing strategies. ESP vocabulary learning difficulties include both semantic and phonetic / spelling problems. Appropriate teaching materials, learning strategies and the interactions between learners and teachers are the essential components to solve the existing learning difficulties. In this study, an investigation of learners’ perceptions regarding ESP vocabulary learning was conducted to help language teachers understand what learners really need.
Purpose of the Study

The purpose of this study was to investigate the attitude of students towards ESP vocabulary learning methods offered by the textbook and the teacher, as well as the awareness of and the preferred vocabulary teaching/learning strategies among Agriculture University students while they were taking an English for agriculture course.

Research Questions

1. How useful is the textbook in terms of helping vocabulary acquisition?
2. What types of vocabulary do students need to learn?
3. Are students aware of vocabulary memorization strategies? What vocabulary memorization strategies do students mostly apply?
4. Are students aware of strategies of guessing the meaning of unfamiliar vocabulary? What strategies of guessing the meaning of unfamiliar vocabulary do students use?

Literature Review

Hutchinson and Waters (1987) indicated that the reasons for the emergence of all ESP programs were the demands of the electronic age, a revolution in linguistics, and the focus on learners. Learner needs for revolutionary linguistics was the main reason for the emergence of ESP programs. The enormous expansion in scientific, technical, and economic activities increased the demand for learning ESP courses. In comparison with the traditional linguists, revolutionary linguists focused on how languages were used in real situations. The effect of ESP development exerted increased pressure on language teaching.

Ewer (1983) recognized that traditional English teachers were trained in literature and language. They tended to claim English for general purposes as their specialist discipline and displayed a hostile attitude to others, such as English for science and technology, and business and economics. Widdowson (1983) presented two interpretations of learner needs. One was goal-oriented definitions of needs and related to terminal behavior. The other was process-oriented definitions of needs and related to transitional behavior, (i.e., the means of learning). In comparison with traditional linguists, revolutionary linguists have focused on methods in which languages are used in real situations. Swales (1983) indicated that most studies of lexis and ESP were centered on language, not pedagogy. Halliday, McIntosh, and Strevens (1964) mentioned that the course design addresses learner needs, such as English for civil servants, for agriculture university students, and for others.

ESP programs should focus on various learning strategies, schemata, motivations, and interests. ESP materials play an integral role in developing a successful ESP program. Nababan (1993) indicated that specific areas and learner types were the most significant elements for designing ESP teaching programs. ESP teaching materials should be
based on a syllabus that covers all of the learner needs in their present studies and future professions. According to the suggestions by Munby (1978) for ESP materials, syllabus specification is directly derivable from prior identification of the communicative requirements of learners. Learner needs should be the first criteria for ESP course design. Once the content has been recorded, analyzed, and organized, teachers will possess efficient learning materials to teach the learners with confidence and certainty.

ESP vocabulary teaching is one of the essential components for educational practitioners to implement successful ESP programs. Nababan (1993) mentioned that the vocabulary component is the central core of numerous ESP programs. Vocabulary is the most prominent feature of a register, and words have particular meanings depending on the specific register in which they are used. However, ESP vocabulary always presents a major linguistic obstacle to nonnative English-speaking students. It is difficult to learn words in general, especially those ESP terms which are not the same in all languages, because they are low frequency words and are not encountered very often. Vocabulary acquisition is incremental in nature and this means that words are not learned instantaneously but they are learned over a period of time. The number of words learned depends on numerous exposures to a particular word. This is exactly why ESP vocabulary learning strategies and storage should be emphasized in ESP classes. Vocabulary learning strategies are an effective tactic for ESP vocabulary acquisitions.

Establishing a connection between spelling and pronunciation can tremendously enhance ESP vocabulary recognition and reading ability because English is an alphabetic language. Word decoding and recognition ability are vital factors that improve ESP reading comprehension and speed. The knowledge of basic affixes, roots, suffixes, and word formation help learners decode ESP vocabulary. Decomposing an unfamiliar word into its structural components and inferring its meaning from them is called structural analysis. Several researchers (Nation, 1990; Hsueh, 1997) have mentioned that learning affixes can successfully teach students ESP vocabulary structural analysis. By becoming familiar with only a few roots, affixes, and suffixes, students can determine the meaning of very many words. In addition, teaching the word formation of ESP vocabulary can help learners memorize and recognize it in an effective manner. Word decoding instruction results in improving learners’ ability to infer word meaning.

Dudley-Evans and St John (1998) distinguish two types of ESP vocabulary, general vocabulary with higher frequency or with specific meaning in a particular field. They also believe that that ESP teachers should not teach technical vocabulary but should check if the learners understood technical vocabulary that appears as carrier content for an exercise. This research aims at finding out whether ESP students are of the same opinion.

Nation (1997) was among the first researchers who developed vocabulary learning strategies and he points out that vocabulary learning strategies should involve choice, i.e., there are several strategies to choose from; be complex, i.e., there are several steps to learn; require knowledge and benefit from training; increase the efficiency of vocabulary learning and vocabulary use. Therefore some of the possible vocabulary learning strategies that can be used in teaching ESP vocabulary are the following: synonyms/ antonyms, learning words by categories, by topic,
by word families and also vocabulary cards. Nation (2001, p. 245) emphasizes the importance of prior knowledge of the topic and that real world knowledge can play a vital part in guessing, especially when it provides the schema or the background knowledge for readers. Another strategy used by the learners to find out the meaning of the unknown words is the monolingual dictionary. In general monolingual dictionaries contain much more information about each word than bilingual dictionaries (Nation, 2001).

Takač (2008) notes that vocabulary learning strategies (VLSs) are particular strategies used for learning vocabulary in either general English or ESP. Learning vocabulary for speaking and writing, as productive skills, requires different strategies from learning vocabulary for listening and reading, as perceptive skills, (Laufer, 1998).

As vocabulary learning is not easy, applying strategies becomes crucial for success. Vocabulary teaching/learning strategies can be direct (mostly applied for productive vocabulary skills) and indirect (mostly used for receptive vocabulary skills). Morphological analysis of word structure is effective for both direct (used in class) and indirect (used in independent work) strategies of vocabulary learning. The usefulness of teaching vocabulary and reading strategies for reading comprehension was shown by Al-Ghazo (2016), Cubukcu (2008), Habibian (2015), Mokhtar et al (2011), and Wichadee (2011) and many others. The usefulness of vocabulary and listening strategies for listening comprehension was revealed by Tabeei, Tabrizi, and Ahmadi (2013). Erskine (2010) and McLoughlin et al. (2000) held studies that support the positive impact of language learning strategies on language proficiency.

**Research Methodology**

**Study Subjects**

The subjects in this study were 107 students enrolled in Agriculture University, bachelor programs, aged 17-21. They were first-year and second-year students. Their participation in the survey was voluntary.

**Instruments**

*The Questionnaire*

The research held was a quantitative one. A questionnaire (see Appendix) designed by the researcher was used to determine the students’ perceptions of ESP vocabulary learning difficulties and strategies. The questionnaire represents students’ learning difficulties, learning sources, and learning strategies in ESP vocabulary.

**3.3 Data Collection and Analysis**

The ESP vocabulary learning questionnaire was administered to the Agriculture University students who were enrolled in the agricultural English course as a requirement. The participants were selected at random among volunteers. An electronic questionnaire was had to be assessed by the participating students. Students were informed about its web address. It was completed and evaluated. Data were analyzed by the author.
**Results and Discussion**

The results of the survey (Likert-scale format items) are presented in Table one, some of items (multiple choice) are presented in text format.

<table>
<thead>
<tr>
<th>#</th>
<th>question</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Mean rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How effective is the book you study in terms of vocabulary learning?</td>
<td>2%</td>
<td>3%</td>
<td>45.5%</td>
<td>26.3%</td>
<td>23.2%</td>
<td>3.1</td>
</tr>
<tr>
<td>2</td>
<td>How effective are the vocabulary exercises in the textbook and the ones used by your teacher to enrich your vocabulary?</td>
<td>1%</td>
<td>4.1%</td>
<td>32.7%</td>
<td>30.6%</td>
<td>31.6%</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>Rate the importance of the type of vocabulary that should be part of your course.</td>
<td>General vocabulary</td>
<td>2.7%</td>
<td>1.3%</td>
<td>26.7%</td>
<td>57.3%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>General academic vocabulary</td>
<td>6.7%</td>
<td>2.7%</td>
<td>33.3%</td>
<td>41.3%</td>
<td>16%</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>General agricultural vocabulary</td>
<td>11.7%</td>
<td>11.7%</td>
<td>36.4%</td>
<td>23.4%</td>
<td>16.9%</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Vocabulary according to my narrow specialty in agriculture</td>
<td>9.7%</td>
<td>12.9%</td>
<td>25.8%</td>
<td>40.9%</td>
<td>10.8%</td>
<td>2.3</td>
</tr>
<tr>
<td>4</td>
<td>Rate the type of vocabulary exercises according to efficiency</td>
<td>Gap filling</td>
<td>3.5%</td>
<td>7.1%</td>
<td>23.5%</td>
<td>34.1%</td>
<td>31.8%</td>
</tr>
<tr>
<td></td>
<td>Matching</td>
<td>2.3%</td>
<td>14.1%</td>
<td>17.7%</td>
<td>37.7%</td>
<td>28.2%</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>Grouping and classifying</td>
<td>4.8%</td>
<td>8.3%</td>
<td>25%</td>
<td>27.4%</td>
<td>34.5%</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>Making up collocations / sentences</td>
<td>4.9%</td>
<td>8.5%</td>
<td>13.4%</td>
<td>31.7%</td>
<td>41.5%</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Interpreting the word in the listening / reading text (multiple choice)</td>
<td>3.5%</td>
<td>9.4%</td>
<td>12.9%</td>
<td>30.6%</td>
<td>43.5%</td>
<td>3.0</td>
</tr>
</tbody>
</table>
The opinions of the efficiency of the textbook used (question 1) split about half to half: 48.5% of the respondents believe the book is either not useful at all or is useful to some degree (2% have no opinion), while 49.5% believe the book is either quite efficient or very efficient. The average point is reasonably high (3.1 out of 4). While assessing the vocabulary exercises (question 2), the respondents express a little bit more positive views: 36.8% assess them negatively, while 62.2% positively (1% has no opinion). The average point is also reasonably high – 3.0. Thus the general the quality of the textbook used and the vocabulary teaching done is not so bad, but still there are quite many dissatisfied students.

According to question 3, students more or less proportionately want to study general, general academic, general agricultural and narrow specialty vocabulary. However, the need in ESP is somewhat lower than the need in GE and EAP. The result agrees with Dudley-Evans’s and St John’s (1998) views on teaching vocabulary in an ESP course. There may be two explanations for it: their general and academic language is not on a high level and they experience the need in increasing it and/or they are aware (from specialty courses) of ESP vocabulary, much of which is international (the same in the target and the native language). But, of course, to know the real reason a special research is needed, which is beyond the scope of this article.

The ratings of the vocabulary exercise types (question 4) did not differ from each other too much and are not too high (only matching exercises are rated rather high – 3.4; others are rated 3.0 or below). It means some innovative types of exercised are needed. Gap-filling and grouping exercises were rated the lowest, which may be related to the fact that teaching is more reading based, while these exercises are of productive nature, however, to make conclusions, further research which is beyond the scope of this article would be needed.

Although 58.5% assess their ability to identify key words in the text (question 5) as very good or good (question 5), the average level of the answers is quite low (2.6), which means that this strategy is not developed among the students.

As for the answers for other questions, they are:

Question 6: Few students (5.2%) said they do not use any clear strategies of guessing the meaning of the unfamiliar words. 53.7% of students try to guess the meaning based on the context (collocations), which is a good strategy. Guessing based on the subject / topic (31%), the whole text (28.4%), on the grammatical function and place in the sentence of the word (20%), looking up in a bilingual dictionary (22.1%), a combination of a bilingual dictionary with context (23.2%) are also quite popular strategies, while such strategies as using word structure (16.8%), using
monolingual dictionaries (12.6%), and a combination of monolingual dictionary with context (16.8%) are seldom used, which means they need to be developed with the respondents. It is also a pity that more students rely on a bilingual dictionary than do on a monolingual dictionary alone or its combination with the context.

Question 7: As for vocabulary memorization strategies of the respondents, they turned out to be quite poor. 85% of students admitted they had no strategies except rote memorization—just trying to memorize from a list with translations silently (18.1%), pronouncing the words and their translations aloud (23.4%), pronouncing the words and typical sentences aloud (27.7%) and writing the words (15.8). The rest used very limited strategies, among which relatively popular were keeping a personal vocabulary organized the way they thought convenient for them, revising it from time to time (33.3% of the left 15 students), abundant listening (20% of the left 15 students). Other strategies, namely abundant reading, abundant listening, association with a native language or target language word (were applied by 1-2 students each). Flash cards were not used by any respondent. Thus, students’ vocabulary learning strategies definitely need improvement.

**Limitations of research and directions of further study**

The research deals with students of one university in one country. To make more far-reaching conclusions, it has to be carried out on a wider basis. After finding out the problems, it is necessary to offer a model of teaching ESP vocabulary that will be more effective than the current one and to test its efficiency. This will be the further step of our research.

**Conclusion**

Both the literature review and the survey held have shown that learning vocabulary in the process of ESP learning is essential and difficult, and the textbooks and practices that exist are imperfect from this viewpoint. They need to incorporate more vocabulary learning strategies to be more effective.

The students of Agricultural University of Georgia who participated in the research feel the need to study, more or less proportionately, general English, general academic English, general Agricultural English and narrow (according to their specialization) special English vocabulary. Either course book authors should take this into consideration or, most probably, in the near future, it is teachers’ responsibility to compensate for this disadvantage.

Students do have some strategies of guessing the vocabulary meaning, however, they need more efficient strategies and they have to be purposefully developed in the process of teaching. The respondent students have very poor strategies of vocabulary memorization, which is a great obstacle to enriching their vocabulary. These strategies also have to be taught at English lessons.
Appendix

Questionnaire

1. How effective is the book you study in terms of vocabulary learning?
   
   (0 – do not have an opinion, 1 - not at all, 2 - to some degree, 3 – quite efficient, 4 - very efficient)

2. How effective are the vocabulary exercises in the textbook and used by your teacher to enrich your vocabulary?
   
   (0 – not at all effective, 1 - a little effective, 2 – to some degree effective, 3 – quite effective, 4 – very effective)

3. Rate from 0 to 4 the type of vocabulary that should – to your mind – be part of your English course
   
   (0- not taught at all, 1 - a very limited amount taught, 2 – some amount taught, 3- most of vocabulary taught, 4 – the only type of vocabulary taught)
   a) General English
   b) General academic English
   c) General agricultural English
   d) According to my narrow specialty in agriculture

4. Rate the types of vocabulary exercises according to efficiency
   
   (0- not efficient at all, 1 – a little efficient, 2 – to a certain degree efficient, 3 – quite efficient, 4 – very efficient)
   a) Gap filling
   b) Matching
   c) Grouping and classifying
   d) Making up collocations/sentences/texts
   e) Interpreting the word in the listening / reading text (multiple choice)

5. To what extent do you have the skills to identify the key words in the text?
   
   (0 – not at all, 1- to a little extent, 2- to a certain extent, 3 – to quite a great extent, 4 – on a high level)

6. Choose the strategies of understanding the meaning of the word that you use (you can choose as many / little as you use)
   
   a) No clear strategies, just try to guess intuitively
   b) Based on the whole text