THE JOURNAL OF TEACHING ENGLISH FOR SPECIFIC AND ACADEMIC PURPOSES
Vol. 5, N° 2, 2017, pp. 189–208

UDC: 811.111'255.4:(81'243+801.52) DOI: 10.22190/JTESAP1702189B

GRAMMAR OR VOCABULARY – STUDENTS' FRIENDS OR FOES?

Dragana Božić Lenard[1], Ivanka Ferčec[2], Yvonne Liermann-Zeljak[3]

Josip Juraj Strossmayer University of Osijek, Faculty of Electrical Engineering, Computer Science and Information Technology, Department of Core Courses, Kneza Trpimira 2b, 31 000 Osijek, Croatia
Phone: (385) 31 224 741, E-Mail: [1]dragana.bozic@ferit.hr, [2]ivanka.fercec@ferit.hr, [3]yvonne.liermann@ferit.hr

Abstract. *Grammar has always been regarded as the necessity in establishing successful formal communication. However, students generally perceive grammar instruction as a necessary evil at best. They usually believe their messages will be understood even if a sentence is incorrect. On the other hand, vocabulary learning is the fundamental step in any language learning. Acquiring new vocabulary is of paramount importance in English for Specific Purposes as it is directed towards specific needs of students' particular specialties. The aim of this research was two-fold. We were interested in students' preferences for learning grammar and vocabulary and their performance in exams. For the purpose of the research, 230 students studying at the Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, Croatia were surveyed. The results showed that the students believe acquiring new technical vocabulary is more important and useful than studying grammar. In the second part of the research, both the first and the second revision exams done by the surveyed students were examined regarding the percentage of correct vocabulary and grammar exercises. The analysis indicated that the students were more successful in doing grammar exercises. To put it differently, the results showed that although the students are theoretically more engaged with and more motivated to learn new technical vocabulary because they find it more useful for their future profession, their performance in revision exams has actually shown the opposite results, i.e. they scored more points for grammar related exercises than for vocabulary related ones.*

Key words: *students' preferences, grammar, vocabulary, exam results*

1. INTRODUCTION

Since the early 1960s, English for Specific Purposes has developed to become a typical approach to English language learning and teaching in tertiary education. The importance of ESP is mirrored in the increasing number of courses and universities influenced by the market needs to provide learners with specialized knowledge. ESP courses are designed in such a way that they assume an intermediate level of language knowledge. Therefore, they are focused on the appropriate level of grammar, register and discourse. Since ESP courses aim to prepare students for chosen communicative environments and prospective work-related settings, ESP courses are needs-driven courses focusing on practical purposes. That being said, a needs analysis is an integral part of any ESP course and should be carried out to (re)design a course curriculum, teaching materials, tasks and objectives. A needs analysis

Submitted May 29th, 2017, accepted for publication June 8th, 2017

can be performed by conducting surveys or interviewing students who, when invited to actively participate in their learning process, might feel more motivated to learn.

2. THEORETICAL FRAMEWORK

The needs-driven and practical nature of ESP courses is of utmost importance (Dudley-Evan & St. John, 1998; Graves, 2000; Gatehouse, 2001; Kaur, 2007) due to its impact on language curriculum development. According to Belcher (2006), the current focus is on students' subjective needs; their self-assessment, awareness and instructional expectations, hence research have to be conducted in order to determine objectives and improve an ESP teaching-learning process.

The content of ESP courses can be classified into two major categories – grammar and vocabulary. The role of teaching grammar in ESP contexts has been a debatable issue for decades. Teachers generally do not question the importance of grammar instruction; they only debate about whether it should be taught in a traditional or communicative way. Students, on the other hand, frequently perceive grammar instruction as a necessary evil and an English teacher as a grammar Nazi whose life goal is to point to students' mistakes. Numerous research studies were carried out to find out teachers' and students' perceptions of teaching grammar. According to Leki (1995), Schultz (2001) and Ellis (2006), teachers prefer communicative activities with less focus on explicit grammar teaching, i.e. teachers believe that employing a discourse analysis approach facilitates the language teaching-learning process. In comparison, researchers found that students favor traditional grammar instruction and error correction because of feelings of insecurity. However, more recent communicative language teaching approaches, which marginalize the importance of explicit grammar instruction and error correction, are considered as inadequate (Celce-Murcia et al., 1997; Butler, 2004; Sung, 2006; Littlewood, 2007; Huang, 2016). Moreover, they indicate that focusing on grammatical forms is vital for reaching a high level of accuracy and language acquisition per se. However, students' motivation for learning grammar in ESP classes is usually very low because they generally consider studying vocabulary more useful.

Back in the 1970s, Wilkins (1972: 111) said that "while without grammar very little can be conveyed, without vocabulary *nothing* can be conveyed." Vocabulary knowledge is often perceived as central to communicative competence because a limited vocabulary impedes successful communication. Numerous researchers (Laufer & Nation, 1999; Maximo & Sadowki, 2000; Read, 2000; Nation, 2001 and Gu, 2003) have realized the importance of vocabulary acquisition for both spoken and written activities. Incremental nature of vocabulary acquisition means that words are learned over a period of time and the success of acquiring vocabulary depends on learners' exposure to a particular word. According to Morgan and Rinvolucri (2004), new vocabulary is not learned mechanically but associatively and the role of a teacher is to use students' previous knowledge and systematically build on it bringing them to the next stage. Even though the importance of studying vocabulary is obvious, students may find it more difficult than studying grammar due to the open-endedness of a vocabulary system. In comparison to grammar, vocabulary does not have fixed rules students may abide by to acquire it. As noted by Oxford (1990), vocabulary acquisition is the most unmanageable component because of numerous different meanings of a certain word. The responsibility of acquiring vocabulary is both on a teacher who should systematically present it to students and an individual whose motivation for vocabulary mastery should be high.

3. METHODOLOGY

The aim of this research was two-fold. On the one hand, we were interested in finding out students' preferences in learning grammatical units and acquiring new vocabulary. For that purpose, we conducted an anonymous survey involving 230 students studying at Josip Juraj Strossmayer University of Osijek, Faculty of Electrical Engineering, Computer Science and Information Technology Osijek. Out of the entire population of the students studying at the aforementioned Faculty, we sampled the students to be involved in our research based on the English for Specific Purposes courses they were enrolled in during the winter semester of the 2016/2017 academic year. At the moment of conducting the survey, 107 students (47%) of the undergraduate professional study program were enrolled in the *English language I* course, while 123 students (53%) of the university undergraduate study program were enrolled in the *English language II* course. In addition to the different courses and levels of the study programs, the students study at six available branches at the Faculty. As illustrated in Fig. 1, 60 Informatics, 26 Power Engineering, 21 Automation (undergraduate professional study program), 63 Computer Engineering, 37 Power Engineering and 23 Communication and Informatics students (university undergraduate study program) participated in the survey.

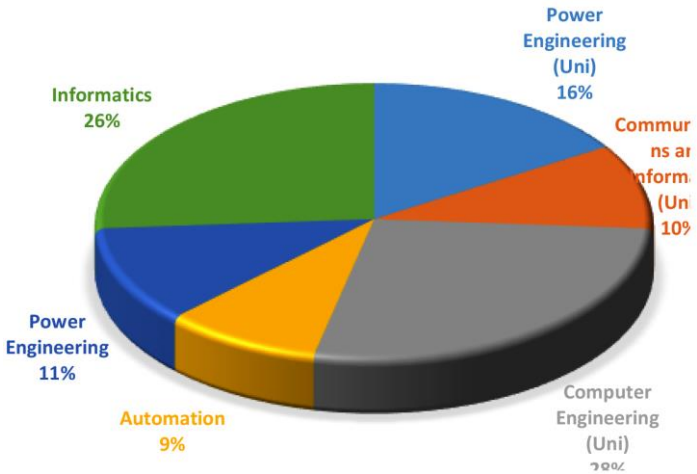

Fig. 1 Distribution of the participants according to the branches of their study programs

Out of 230 students, there were 200 male (87%) and 30 female (13%) students, which is a proportionate share given the number of male and female students normally enrolling in the Faculty. Such a wide diversity of the students included in the sample and the equal representation of the population will contribute to obtain unbiased results. The survey was composed of nine closed-ended questions. The survey results were processed with the software for statistical analysis SPSS which was used to carry out descriptive statistics, independent sample t-test, Chi-square, one-way ANOVA and Pearson correlation tests.

The other part of our research dealt with the revision exams the students took. After grading two revision exams the students took during the semester, we calculated the number of points each student scored on grammar-related and vocabulary-related exercises. The

survey and revision exam results were compared in order to examine if the students' studying preferences and importance evaluations were in line with their revision exam results.

The research questions this study aimed to address were the following:

1) What do the students prefer to study in the ESP classes – grammar or vocabulary?
2) How do the students evaluate studying grammar and vocabulary regarding their importance?
3) What do the students study more when preparing for their revision exams?
4) According to their exam results, what do the students acquire more successfully?
5) Are there any gender differences in studying preferences and evaluations?
6) Are there any branch differences in studying preferences and evaluations?
7) Are there any correlations regarding studying preferences and evaluations?

4. Results and Discussions

Longitudinal classroom observations and face-to-face informal interviews the authors have conducted with their students led them to conclude that students generally believe acquiring new vocabulary is more important than studying grammar; yet, they frequently achieve better results in grammar than in vocabulary-related exercises. So, the authors decided to conduct a survey and find out the students' studying preferences accompanied by carrying out a systematic analysis on their revision exam results in order to empirically study this issue.

4.1. Knowledge self-assessment

The students were first asked to self-assess their knowledge of the English language regardless of the grades they have had so far. According to McMillan and Hearn (2008), self-assessment has a powerful impact on empowering students to guide their own learning and gain confidence. The descriptive statistics results showed that 2.2% students from our study think they have insufficient, 13.9% sufficient, 30% good, 37.4% very good and 16.5% excellent knowledge, i.e. the majority of the students think they have a good working knowledge of the English language. While there were no gender differences, using the descriptive statistics test, we did record differences among the branches the students study at as illustrated in Fig. 2.

Namely, 68.2% of the Computer Engineering and 63.4% Informatics students believe they have a very good or excellent knowledge of English in comparison to only 35.1% Power Engineering (undergraduate) students. This inspired us to study group differences in more detail running a one-way ANOVA test and post hoc Tukey tests. As stated, English language self-assessment of the Computer Engineering students is quite high and it significantly differs from the self-assessment done by the Power Engineering (undergraduate), Automation and Power Engineering (professional) students ($p = .003$, $p = .022$, $p = .013$ respectively). Similarly, the Informatics students' self-assessment significantly differs from the one done by the Power Engineering (undergraduate) and Power Engineering (professional) students ($p = .013$, $p = .038$ respectively). To put it differently, the Computer Engineering and Informatics students self-assess their knowledge of English the highest. We will later on see whether their revision exam results confirm their high self-assessment.

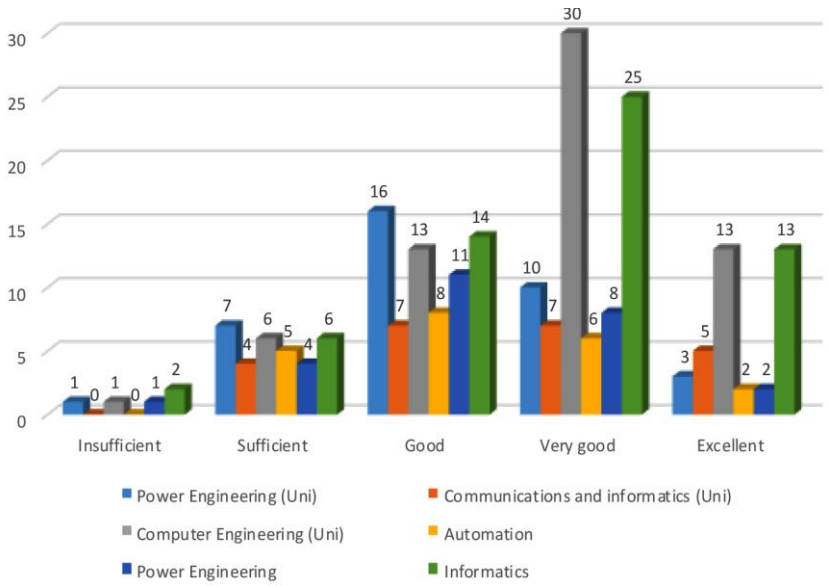

Fig. 2 Self-assessment of the English language

4.2. Studying preferences

We were interested in the students' preferences, i.e. what do they prefer to study in the ESP classes – grammar or technical vocabulary. After running the descriptive statistics test, the results revealed that 166 students (72%) said that they prefer to study new vocabulary, 62 (27%) prefer grammar and 2 answers were missing. This view of vocabulary learning as a fundamental and perennial aspect of continuous language learning was recognized by Thornbury (2002), Zimmerman (2009) and Gifford (2013). Surprisingly, our results are not in accord with similar research done by Schultz (2001), Zhou (2009) and Loewen et al. (2009), who found that students believe grammar is an essential basis for mastering a language; a foundation that has to be firmly established to build a vocabulary upon.

Furthermore, the independent sample t-test showed that there is a statistically significant difference ($p = .032$) between the male and the female students' preferences. A closer analysis done by the Chi-square test pointed to intragroup differences. Precisely, 75% of the male students prefer studying vocabulary, while 25% prefer grammar, which is a statistically significant difference ($p = .000$). In comparison, 57% of the female students prefer vocabulary, while 43% prefer grammar, i.e. the difference is not significant ($p = .465$). There are a couple of possible explanations for this. When enrolling in the faculty, all students have at least a 4-year experience in studying English; yet, the majority of them have an 8-year experience. However, even after studying English for 4 years, students probably gain confidence in their language skills and feel that they acquired a sufficient level of grammatical skills, which is probably the reason why they prefer to acquire new technical vocabulary. It seems possible that the male students believe they had acquired enough grammatical knowledge to engage themselves in a conversation, so referring their attention to enriching their vocabulary seems like a reasonable choice. The female students, on the other hand, did not think in the same way believing that both grammar and

vocabulary are equally important to study. The female students do not give preference to widening their vocabulary at the expense of mastering their grammatical knowledge. The phenomenon of women's hypercorrectness was recorded in the 1970s by Labov (1972), Trudgill (1974) and Lakoff (1975). The researchers proposed that women show a preference for more prestigious standard speech forms in order to gain greater mobility in male-dominated communities. This phenomenon was confirmed in numerous recent research studies (Eckert, 1998; James, 1996; Holmes, 2001; Nevalainen, 2002; Coates, 2015; Božić Lenard, 2016), to name a few. The society sets higher standards for female behavior so their insecurity of social position is associated with their sensitivity to using standardized speech more than men, which might be the reason why the female students from our study felt the need to master their grammatical skills as well as broaden their vocabulary in comparison to the male students who are less reluctant to use non-standardized forms.

Furthermore, using the Chi-square test, we also analyzed if there are some significant differences in studying preferences regarding the branch the students study at. Interestingly, yet rather anticipated, the students studying at all six branches prefer to study vocabulary in their ESP classes. More precisely, 67% of Power Engineering (undergraduate, $p = .033$), 78% of Communications and Informatics ($p = .007$), 70% of Computer Engineering ($p = .000$), 71% of Automation ($p = .050$), 77% of Power Engineering (professional, $p = .006$), 73% of Informatics ($p = .000$) students prefer vocabulary over grammar and according to the p values, all the preferences are statistically significant. It is possible to hypothesize that the students believe that at this point of education, given the fact that they have not studied technical vocabulary in their primary and secondary education, vocabulary is more useful. It is reasonable to expect a strong positive correlation between the studying preferences and future usefulness, which will be elaborated on in the following subsection. Furthermore, this result might point to a positive correlation with vocabulary-related exercises on the revision exams, which will be dealt with in Subsection 4.8.

4.3. Future usefulness

In addition to preferences in ESP classes, the students were asked to determine whether studying grammar or vocabulary is more useful for their future profession. 198 students (86.1%) believe technical vocabulary is more useful, 31 students (13.5%) see grammar as more profitable and 1 answer is missing as recorded by the descriptive statistics test. This result is rather expected since students often instinctively recognize the importance and benefit of acquiring new vocabulary. Also, the result is consistent with similar research and corroborate the ideas of Schmitt (2000), Cameron (2001), and Harmon et al. (2009) that learners' development depends on the acquisition of new vocabulary.

As opposed to the studying preferences, where we recorded intragroup gender differences, when it comes to the future usefulness, both the male and female students agree that enriching vocabulary is more useful for their future profession. 171 male students (86%) and 27 female students (90%) chose vocabulary over grammar. To put it differently, both groups of students voted for vocabulary over grammar with their choice being statistically significant ($p = .000$ in both cases) as recorded by the Chi-square test. Furthermore, intragroup branch differences were examined. As the results given in Table 1 show, all students, regardless of the branch they study at, agree that widening their vocabulary is more useful for their future professions than grammar.

Table 1 Chi-square results on studying preferences with respect to the branches

Course	Type	Observed N	Expected N	Chi-square	
Power Engineering (Uni)	Grammar	3	18.5	Chi-square	25,973
	Vocabulary	34	18.5	df	3
	Total	37		Asymp.Sig.	**.000**
Communications and Informatics (Uni)	Grammar	4	11.5	Chi-square	9,783
	Vocabulary	19	11.5	df	1
	Total	23		Asymp.Sig.	**.002**
Computer Engineering (Uni)	Grammar	11	31.5	Chi-square	26,683
	Vocabulary	52	31.5	df	1
	Total	63		Asymp.Sig.	**.000**
Automation	Grammar	1	10.5	Chi-square	17,190
	Vocabulary	20	10.5	df	1
	Total	21		Asymp.Sig.	**.000**
Power Engineering	Grammar	5	13.0	Chi-square	9,846
	Vocabulary	21	13.0	df	1
	Total	26		Asymp.Sig.	**.002**
Informatics	Grammar	7	20.0	Chi-square	77,700
	Vocabulary	52	20.0	df	2
	Total	59		Asymp.Sig.	**.000**

Additionally, we checked if there are some significant differences between the male and female students regarding the branches they study at. While all other male and female students opted for vocabulary as more useful, the female students studying at the branch of Communications and Informatics ($p = .102$) and Computer Engineering ($p = .059$) were not that certain. This result further supports our idea that female students are pressurized to use prestigious standard language forms and perceive both vocabulary and grammar equally useful in their future professions.

Given the results reported in Subsection 4.2. on the students' preferences for studying vocabulary, we were inspired to examine if a correlation between the students' studying vocabulary preferences and opinion that vocabulary is more useful exists. Contrary to expectations, using the Pearson Chi-square correlation test, this study did not find a statistically significant correlation ($p = .750$) between the studying preferences and usefulness. A possible explanation might be that when deciding what they like to do in their ESP classes, the students do not think in terms of its usefulness; rather, their studying preferences might be related to the method and quality of teaching, types and diversity of exercises or quality of teaching materials. However, a more detailed analysis including the variables of gender and branches pointed to a statistically significant positive correlation, i.e. the male students studying at the undergraduate Power Engineering ($p = .029$) and professional Power Engineering ($p = .044$) branch probably prefer studying vocabulary due to its pragmatic nature.

4.4. Importance of studying grammar

Disregarding one's preferences, grammar is a necessity because it plays an essential role in establishing formal communication. Studying grammar is undeniably important in the process of language learning; however, students' attitudes on this issue cannot be ignored. The students from our study were asked to evaluate the importance of studying grammar using a five-level Likert scale. 1.3% of the students evaluated it as not important at all, 6.5% with low importance, 20.9% as neutral, 60.4% as moderately and 10.9% as very important, i.e. 71.3% of the students do recognize the importance of studying grammar. This result is consistent with several recent studies (Schultz, 2001; Zhou, 2009; Loewen et al., 2009; Incecay & Dollar, 2011) which reported on students' attitudes towards learning grammar as the cornerstone of language learning. Students' attitudes cannot be ignored because attitudes play an important role in their motivation and effectiveness of class activities and learning itself.

The analysis of the students' attitudes on the importance of studying grammar was extended to potential gender and branch differences. The independent sample t-test recorded that 138 male students (69%) believe that studying grammar is moderately or very important in comparison to 26 female students (87%), i.e. the gender difference in the students' attitudes on the importance of studying grammar is statistically significant ($p = .022$). This finding again supports our claim that female students recognize the importance of studying grammar due to societal pressure women are put under.

The issue on the importance of studying grammar was examined with respect to the branches the students study at. The descriptive statistics test results are given in Fig. 3.

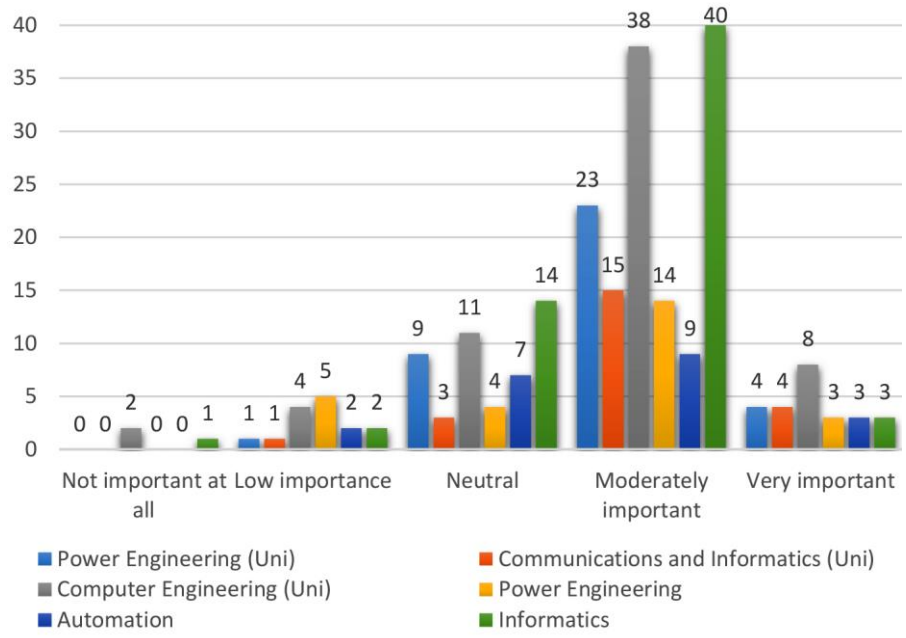

Fig. 3 Opinion on the importance of studying grammar

We were also interested in finding out if these differences were statistically significant so we ran the one-way ANOVA test which was unable to record any significant differences ($p = .591$) among the branches.

Using the independent sample t-test, we wanted to analyze whether there were any significant differences between the students' studying preferences and their opinion on the importance of studying grammar. As reported in Subsection 4.2., the female students almost equally prefer to study grammar and vocabulary in the ESP classes so no significant difference ($p = .086$) was rather expected. However, we did find a statistically significant difference ($p = .011$) in the subset of the male students, i.e. even though the male students prefer to do vocabulary-related exercises in the ESP classes, they do recognize the importance of studying grammar. The difference was even more significant in the subset of the Computer Engineering students who despite preferring to study vocabulary in the ESP classes are well aware of the importance of studying grammar ($p = .002$).

4.5. Importance of studying vocabulary

Vocabulary acquisition is a long term process which requires a lot of effort and work done by students. Similar to the question on the importance of studying grammar, the students were asked to evaluate the importance of studying vocabulary by choosing one option in a five-level Likert scale. The descriptive statistics test results showed that there were no students believing that vocabulary is not important; 1 student (0.4%) thinks studying vocabulary is of low importance, 17 students (7.4%) believe it is neutrally, 138 (60%) moderately and 74 (32.2%) very important. According to these results, 92.2% of the students recognize the importance of studying specialized vocabulary; hence, our results support the idea of Laufer and Nation (1999), Read (2000), Maximo and Sadowki (2000) and Gu (2003) that acquiring vocabulary is crucial. Furthermore, our results are in line with similar more recent findings of Walters (2004), Liermann-Zeljak and Ferčec (2015) and Alqahtani (2015) whose participants recognized the acquisition of vocabulary as the central factor in language learning.

In comparison to gender differences on the importance of studying grammar, the independent sample t-test could not record statistically significant gender differences on the importance of studying vocabulary ($p = .759$), i.e. the male ($M = 4.21$) and the female ($M = 4.47$) students equally believe that acquiring vocabulary is extremely important for their language development. This is a rather expected finding since students naturally feel the need to acquire specialized vocabulary. Also, we only expected to find gender differences with respect to grammar which several of our previous findings corroborated.

As in the previous subsection, we were interested in the responses distribution regarding the branches the students study at. Unlike the results on the importance of studying grammar, the results provided in Fig. 4 point to a less widespread distribution of the students' responses.

However, despite generally agreeing on the importance of studying vocabulary, there are some statistically significant differences recorded by the one way ANOVA test. Namely, 70% of the students of Informatics believe studying vocabulary is moderately and only 16% think it is very important compared to 51% of the undergraduate Power Engineering students who think it is moderately and 46% believing it is very important. Further, 43% of the Communications and Informatics students think it is moderately and 56% it is very important. To put it differently, the students of Informatics are not as convinced as the

students of Power Engineering (p = .009) or Communications and Informatics (p = .002) that acquiring new vocabulary is vital for language learning.

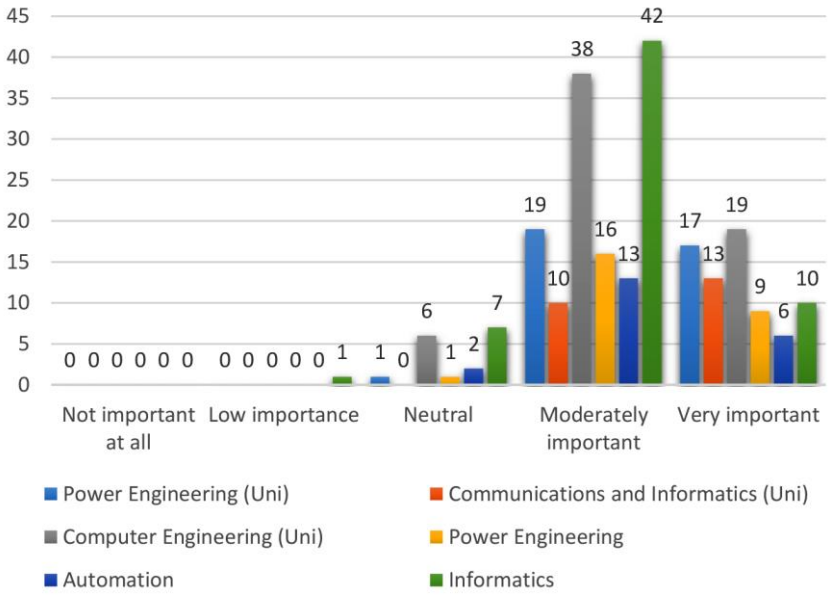

Fig. 4 Opinion on the importance of studying vocabulary

Additionally, the variables of gender and branch were combined and potential differences examined by the one way ANOVA test. Only 17% of the male students of Informatics perceive studying vocabulary as very important as opposed to 75% of the female students of undergraduate Power Engineering (p = .030) and 83.3% of the female students of Communications and Informatics (p = .037). So, our finding that the students of Informatics are not strongly convinced that studying vocabulary is an absolute necessity should be further subdivided into the group of the male students of Informatics.

We wanted to examine whether a correlation between the importance of studying grammar and vocabulary existed and what type the correlation was. The Pearson correlation test pointed to a strong positive correlation [r_p (230) = .229, p = .000] which means that those students who highly evaluate studying grammar have the same opinion on studying vocabulary. The analysis was further extended to potential gender and branch differences. Since our previous findings pointed to the female students putting more emphasis on grammar, the absence of any statistically significant difference [r_p (30) = .106, p = .578] between the importance of studying grammar and vocabulary by the female students did not come as a surprise and it supports our previous findings. The significant correlation [r_p (200) = .225, p = .001] was recorded for the male students, i.e. those male students who believe studying grammar is very important think the same for studying vocabulary. Two significant differences with respect to branches were recorded. Namely, the opinion of the undergraduate Power Engineering and Informatics students on the importance of studying grammar and vocabulary has a strong positive correlation [r_p (37) = .457, p = .004; r_p (60) = .257, p = .047, respectively].

The independent sample t-test did not find a statistical significance between the students' preferences in the ESP classes and their opinion on the importance of studying vocabulary (p = .885). It seems possible that the students are aware of the importance of studying vocabulary in general but their preferences in the ESP classes are related to their factors such as the quality of teaching and/or variety of materials and exercises. One anticipated finding is the association between the importance of studying vocabulary and its future usefulness (p = .036).

4.6. Studying for the revision exams

The significance of a thorough preparation for revision exams need not to be specially stressed because everybody knows it is a key to ensuring success. However, a preparation does not include only immediate studying prior to revision exams; rather, it includes acquiring knowledge during classes and by writing homework assignments. Since the students from our research recognized the importance and usefulness of studying vocabulary, we expect that they study it for their revision exams more than they study grammar. The descriptive statistics test showed that 102 students (44.3%) study grammar more than vocabulary, 121 students (52.6%) devote more attention to studying vocabulary and 7 students (3%) did not respond to this question which might mean that they do not study for their revision exams at all. The Chi-square test showed that this difference is statistically significant (p = .000) from the expected frequencies. Interestingly, all 7 students who did not respond to this question are men, which points to the female students being more responsible and mature in completing their tasks or, in this case, the survey.

Naturally, we were interested in potential gender and branch differences. Both the male and the female students spend more time studying vocabulary for the revision exams, which is expected given the fact that specialized vocabulary is something the majority of them have never dealt with. As provided in Table 2, the Chi-square test revealed that the difference in the female's choice of studying grammar or vocabulary for the revision exams is not statistically significant (p = .068), while the male students' habits of focusing on studying vocabulary significantly differ (p = .000) from the expected frequencies.

Table 2 Chi-square results on gender differences in studying for the revision exams

Sex	Type	Observed N	Expected N	Chi-square	
Male	Missing	7	66.7	Chi-square	80,710
	Grammar	92	66.7	df	2
	Vocabulary	101	66.7	Asymp. Sig.	**.000**
	Total	200			
Female	Missing	0	15.0	Chi-square	3,333
	Grammar	10	15.0	df	2
	Vocabulary	20	15.0	Asymp. Sig.	**.068**
	Total	30			

Further, we did a descriptive statistics analysis whose results are given in Fig. 5.

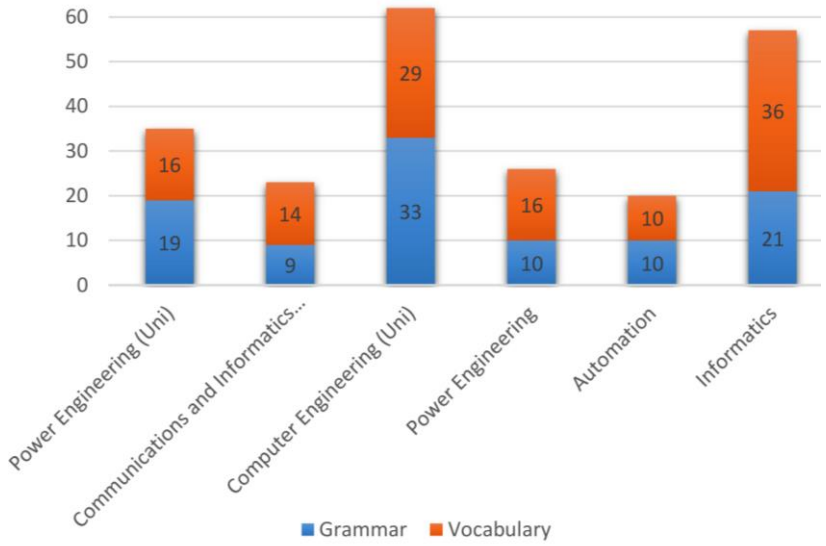

Fig. 5 Studying preferences for the revision exams with respect to the branches

As illustrated, several undergraduate Power Engineering and Computer Engineering students study grammar more than vocabulary for the revision exams. A possible explanation for this might be that they have poorer background grammatical knowledge. Another possible explanation might be that there are more grammar-related exercises on the revision exams so studying grammar is more beneficial.

Furthermore, using the Chi-square test, it was examined whether the expected frequencies of the students' studying choice differed from the observed frequencies. There were no significant differences of the Communications and Informatics ($p = .297$), Automation ($p = .210$) and professional Power Engineering students ($p = .297$) which implies that they equally study grammar and vocabulary for the revision exams. In comparison, statistically significant differences were found for the undergraduate Power Engineering ($p = .001$), Computer Engineering ($p = .000$) and Informatics ($p = .000$) students. However, the undergraduate Power Engineering and Computer Engineering students study grammar while Informatics students study vocabulary more for the revision exams.

To be more precise, the Computer Engineering male students study grammar significantly more than vocabulary ($p = .000$), while their male Informatics colleagues study vocabulary significantly more than grammar ($p = .000$). This finding is somewhat surprising because both the Computer Engineering and Informatics study programs are very similar and the number of unknown vocabulary items is pretty much the same. The inconsistency can have a couple of possible explanations. The Computer Engineering male students might have a broader previous knowledge so they can compensate on it and focus on grammar. Another explanation is that grammar-related exercises the Computer Engineering male students take are more difficult and/or outnumber vocabulary-related exercises, hence directing their attention to studying grammar is a reasonable choice.

Possible correlations of studying preferences in the ESP classes, the students' opinion on future usefulness and studying for the revision exams seem logical so we ran the Pearson Chi-square correlation test to examine it. The test showed that there is no statistically significant correlation ($p = .952$) between the students' preferences in the ESP classes and studying for the revision exams which might suggest that their preferences in the ESP classes are based on the quality of teaching resources and types of exercises. Also, no gender ($p = .193$) or branch differences ($p = .530$) were recorded. Furthermore, we were unable to find significant correlations between the students' opinion on future usefulness and their revision exam studying habits ($p = .376$). Similarly, no gender ($p = .123$) or branch differences ($p = .376$) were found. This discrepancy might be attributed to the students' perception of the learning process – even though they recognize the importance and usefulness of acquiring new vocabulary, they study to pass their revision exams and not to actually learn something which will be beneficial to them in the long run.

4.7. Achieving results on the revision exams

The final survey question was for the students to self-evaluate whether they master grammar or vocabulary better in the revision exams. Since all students are invited to check and discuss their score on the revision exams during the teachers' office hours, this was not a difficult inquiry for the students. The descriptive statistics test showed that 120 students (52.2%) think they get better results on vocabulary-related exercises, 108 (47%) on grammar-related exercises and 2 answers (0.9%) were missing.

Breaking the descriptive statistics results down to gender, presented in Table 3, the male students think they achieve better results in vocabulary-related and the female on grammar-related exercises. The Chi-square test pointed to a significant difference – the female students think they achieve better results in grammar-related exercises significantly more than in vocabulary-related exercises ($p = .000$), while the male students' results did not indicate such a significance ($p = .144$).

Table 3 The students' self-evaluation of the revision exam

Gender	Type	Frequency	Valid percent
Male	Grammar	89	44.5
	Vocabulary	109	54.5
	Missing	2	1.0
	Total	200	100.0
Female	Grammar	19	63.3
	Vocabulary	11	36.7
	Missing	0	0
	Total	30	100.0

When it comes to breaking down the descriptive statistics results to the branch the students study at, illustrated in Fig. 6, we see that the Communications and Informatics, Computer Engineering and Informatics students believe they achieve better results in grammar-related exercises.

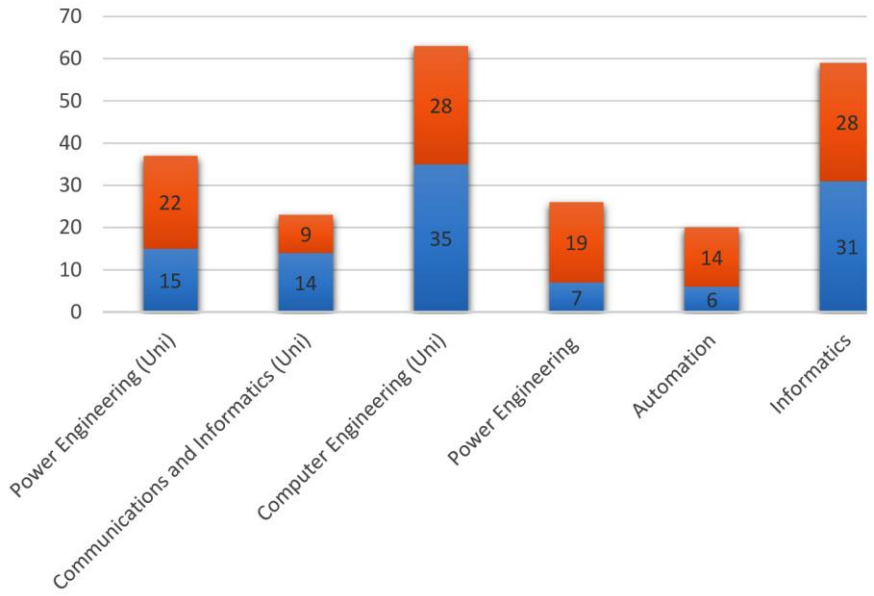

Fig. 6 The students' self-assessment of the revision exams with respect to branches

Carrying out the Chi-square test, it was recorded that the male Computer Engineering ($p = .041$) and Informatics ($p = .017$) students think they achieve significantly better results in grammar-related exercises ($p = .041$) whereas male Automation students believe they achieve significantly better results in vocabulary-related exercises ($p = .020$). It will be interesting to check whether their self-assessment is in line with their actual results in the revision exams, which we will elaborate on in the following subsection. If the results on students' studying habits, reported in the previous subsection, are compared to these results, one discrepancy stands out. The male Computer Engineering students answered that they study grammar significantly more than vocabulary for the revision exams so their self-assessment of achieving better results in grammar-related exercises in the revision exams is rather expected and logical. However, the finding that was unexpected is the one including the male Informatics students. They opted for vocabulary as something they study significantly more for the revision exams; yet, they believe they achieve significantly better results in grammar-related exercises. There are several possible explanations for this discrepancy. Firstly, the students do not spend enough time studying for the revision exams and/or they start studying too late, which results in poor acquisition of the studying content. Secondly, if they do spend enough time studying, the studying methods and techniques of the male Informatics students are inadequate resulting in a waste of time and poor acquisition of the studying content. Finally, the students are not honest when completing the survey; rather, they complete it to be in line with possible teachers' expectations or to complete their task of doing the survey regardless of its content.

Furthermore, interesting findings were recorded with the Spearman Chi-square correlation test with respect to the ESP classes' preferences and revision exam results. Those students who prefer to study grammar in the ESP classes achieve significantly

better results in grammar-related exercises in the revision exams, i.e. the students who prefer to study vocabulary in the ESP classes achieve significantly better results in vocabulary-related exercises ($p = .000$). This result speaks in favor of the quality of teaching and use of high quality teaching resources and class materials. The same test was conducted after breaking the file down to gender and the results were identical – both the male ($p = .003$) and female students ($p = .034$) who prefer to study grammar or vocabulary in the ESP classes achieve significantly better results in activities they prefer to do in the classes.

Similar results were recorded for some branches. Namely, the undergraduate Power Engineering ($p = .003$) and Computer Engineering ($p = .010$) students' preferences in the ESP classes are in accord with their self-assessment revision exam results while no such correlations were found for the Communications and Informatics ($p = .280$), professional Power Engineering ($p = .146$), Automation ($p = .072$) Informatics students ($p = .274$). This might mean that the undergraduate Power Engineering and Computer Engineering students are more motivated, engaged and interested to learn in the ESP classes. We also wanted to analyze any gender differences on this issue and found that the male undergraduate Power Engineering ($p = .014$), male Computer Engineering ($p = .013$) and female Informatics ($p = .008$) students are the ones whose class preferences are in line with their revision exam results.

When it comes to the students' opinion on future usefulness and their self-assessment in the revision exams, only one significant difference was recorded. Those female Computer Engineering students who believe grammar is more useful for their future profession achieve better results in grammar-related exercises and those who perceive vocabulary as more beneficial achieve better results in vocabulary-related exercises ($p = .008$). It seems possible that the female Computer Engineering students spend more time studying and achieve better results on what they consider more beneficial for their future, i.e. they do not study only to pass their revision exams but to acquire knowledge for future.

Finally, several significant negative correlations were found between the students' self-assessment in the revision exams and their opinion on the importance of studying grammar. Believing that studying grammar is of low importance, the undergraduate Power Engineering ($p = .050$), male Computer Engineering ($p = .041$) and male professional Power Engineering ($p = .030$) students probably spend more time studying vocabulary, which results in high scores in vocabulary-related exercises ($p = .050$), at least in the students' opinion. How each gender and branch actually scored in two revision exams will be presented in the following subsection.

4.8. The revision exam results

The other part of our research was a detailed analysis of the two revision exams the students took during the winter semester of the 2016/2017 academic year. After the exams had been graded, we calculated the points of grammar and vocabulary-related exercises for each student and summed the results up. The results were compared to the maximum number of grammar and vocabulary-related exercises and the percentage was calculated. The percentage of the correct grammar-related exercises was 66.27 compared to 59.08 for the correct vocabulary-related exercises. Even though the difference was not statistically significant ($p = .191$), it is clear that the students scored better in the grammar-related exercises. This is not in line with the results on the students' studying habits, reported in Subsection 4.6, which showed that 44.3% of the students study grammar and 52.6% vocabulary for their revision exams. It is likely that the students' studying habits and methods are inadequate or inappropriate.

Since we broke all the previous results down to gender and branches, we will do the same with the exam scores for the purpose of comparison. As presented in Fig. 7, the students from all six branches scored better in grammar than vocabulary-related exercises.

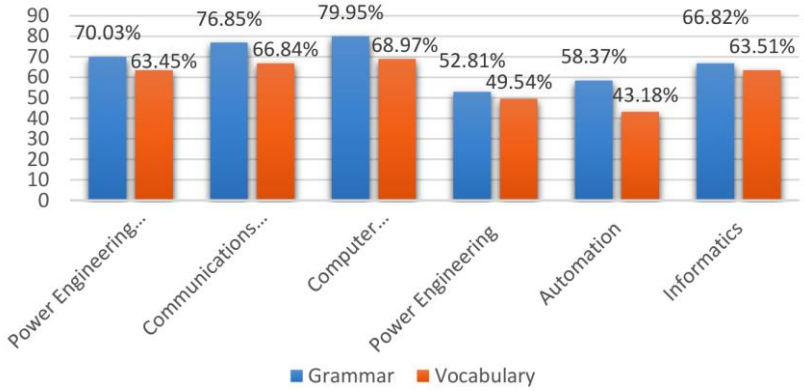

Fig. 7 The revision exams with respect to branches

In spite of the fact that the differences are relatively small and insignificant, the fact is that the students obviously acquire grammatical rules better than vocabulary items. A possible explanation is in the nature of the two contents. Grammar has fixed rules students can go by. Moreover, engineering students, who think in a logical way, may perceive grammar rules as mathematical formulas they are frequently exposed to, thus finding it very easy to acquire. On the other hand, open-endedness of a vocabulary system may demotivate students, make their studying less efficient and result in poorer acquisition. When the revision exam results are compared to the students' studying habits presented in Fig. 5, we can see some discrepancies. The undergraduate Power and Computer Engineering students said that they studied grammar more than vocabulary for the revision exams and their exam results do confirm that. In comparison, in spite of focusing more on vocabulary than on grammar, the Communications and Informatics, professional Power Engineering and Informatics students scored better in grammar-related exercises.

Better exam results in grammar than vocabulary-related exercises were recorded in both the male and female students; however, the differences were more obvious with the female students. More precisely, the female students studying Computer Engineering scored 89.06% in grammar and 66.62% in vocabulary-related exercises. Their female colleagues enrolled in the undergraduate Power Engineering study program scored 78.26% in grammar and 55.96% in vocabulary-related exercises. It seems possible that the fixed-rules and closed-ended nature of grammar makes it more appealing to female students. Also, societal pressure of women using more prestigious language forms might subconsciously encourage them to spend more time studying grammar. On the other hand, female students might not be reading specialized technical readings in their free time making their vocabulary less rich than their male colleagues'.

5. CONCLUSION

The nature of this research was two-fold. Firstly, an anonymous survey, involving 230 students studying at the Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, was conducted. The survey aimed to examine the students' studying habits and preferences in learning grammatical and vocabulary units as well as their views on the usefulness of the two contents. The second part of the research was a comparison of the survey and revision exam results. Generally, the students prefer to do vocabulary in the ESP classes possibly because it is closer to their field. However, we found gender differences, i.e. the female students prefer grammar while the male students give preference to acquiring new technical vocabulary at the expense of mastering grammar. The most obvious finding from this study was that the students believe acquiring vocabulary is more useful for their future profession regardless of their gender or the branch they study at. Interestingly, no statistically significant correlations were found between the students' studying preferences and views on future usefulness, which suggests that the students' studying preferences depend on the quality of teaching and diversity of exercises rather than pragmatics.

Furthermore, according to several of our results, we can conclude that the female students prefer and believe studying grammar is important more than their male counterparts. A possible explanation is in the societal pressure of using prestigious standard language forms women are frequently exposed to. When it comes to the importance of studying vocabulary, both genders and all branches agree that it is moderately or very important. In addition, a strong positive correlation pointed to the following – those students who have a strong positive attitude towards vocabulary have the same opinion on grammar. It seems probable that those are the types of students who are aware of the importance of the English language per se.

Generally, the students said that they study vocabulary slightly more for their revision exams, which is reasonable due to the fact that the majority of them have never dealt with that type of vocabulary. While there are no gender differences, undergraduate Power and Computer Engineering students study grammar slightly more possibly because of the poorer background knowledge. However, we were unable to find correlations between the students' perceptions on future usefulness and their studying habits, which suggests that they study solely to pass their exams and not to actually learn what will be beneficial to them.

When the survey and revision exams results are compared, there is an interesting finding. All students, irrespective of their gender or branches, score better in grammar than vocabulary-related exercises. These results are likely to be related to the fixed logical grammar rules on the one and open-endedness of vocabulary on the other hand. Additionally, the Communications and Informatics, professional Power Engineering and Informatics students who claimed that they study vocabulary more have rather inadequate or inappropriate studying techniques.

The findings of our study suggest that even though students are aware of the importance of acquiring vocabulary which will be more beneficial to their future studying or profession, they still have not matured enough to study for the sake of knowledge and not just to pass their exams. Also, due to a still subordinate position of women, female students feel the pressure to be at their best and excel their male colleagues by using prestigious standard language forms. Moreover, that pressure is even more intense in the field traditionally occupied by men so women have to work much harder to be accepted into the men's society.

To answer the question from our title – our research has proven that in spite of perceiving it as less important, grammar is indeed a students' friend because they are exposed to it longer and they more easily acquire its rules. Vocabulary might be labelled as a students' foe since they obtain poorer scores in vocabulary-related exercises probably because they have to invest more time in learning and practicing it.

REFERENCES

Alqahtani, Mofareh, "The importance of vocabulary in language learning and how to be taught," *International Journal of Teaching and Education* 3(3) (2015): 21-34.

Belcher, Diane "English for specific purposes: Teaching to perceived needs and imagined futures in worlds of work, study and everyday life." *TESOL Quarterly* 40 (1) (2006): 133-156.

Božić Lenard, Dragana, "Gender differences in the political speeches from the 113th United States Congress" (PhD diss., Faculty of Humanities and Social Sciences Osijek, 2016).

Bulter, Yuko Goto "What level of English proficiency do elementary school teachers need to attain to teach EFL? case studies from Korea, Taiwan, and Japan." *TESOL Quarterly* 38(2) (2004): 245-277.

Cameron, Lynne, *Teaching languages to young learners* (Cambridge: Cambridge University Press, 2001).

Celce-Murcia, Marianne, Dörnyei, Zoltan and Thurrell, Sarah "Direct approaches in L2 instruction: a turning point in communicative language teaching?" *TESOL Quarterly* 31(1) (1997): 141-152.

Coates, Jennifer, *Women, men, and language* (London: Longman, 2015).

Dudley-Evans, Tony and St. John, Maggie Jo, *Developments in English for specific purposes: A multi-disciplinary approach* (Cambridge: Cambridge University Press, 1998).

Eckert, Penelope, "Gender and sociolinguistic variation," in *Language and Gender: A Reader*, ed. Jennifer Coates (Oxford: Blackwell, 1998), 64-75.

Ellis, Rod, "Current issues in the teaching of grammar: An SLA perspective." *TESOL Quarterly* 40(1) (2006): 83-106.

Gatehouse, Kristen "Key issues in English for Specific purposes (ESP) curriculum development." *Internet TESL Journal*, 8 (10) (2001).

Gifford, Frederick, *How to enrich your vocabulary?* (New Delhi: Cyber Tech Publications, 2013).

Graves, Kathleen *Designing Language Courses: A guide for teachers* (Heinle and Heinle, 2000).

Gu, Peter Yongqi, "Vocabulary learning in second language: person, task, context and strategies." *Electronic Journal* 7(2) (2003): 1-26.

Harmon, Janis, Wood, Karen and Kiser, Kendall, "Promoting vocabulary learning with interactive word wall." *Middle School Journal* 40(3) (2009): 58-63.

Holmes, Janet, *An Introduction to Sociolinguistics* (London: Longman, 2001).

Huang, Shu-Hsiu "Communicative Language Teaching: Practical Difficulties in the Rural EFL Classrooms in Taiwan" *Journal of Education and Practice* 7 (24) (2016): 186-202.

Incecay, Volkan and Dollar, Yesim Kesli, "Foreign language learners' beliefs about grammar instruction and error correction." *Procedia - Social and Behavioral Sciences 15* (2011): 3394–3398.

James, Deborah, "Women, men and prestige speech forms: a critical review," in *Rethinking Language and Gender Research: Theory and Practice*, ed. Victoria L. Bergvall, Janet M. Bing & Alice F. Freed (London: Longman, 1996), 98-125.

Kaur, Sarjit "ESP course design: Matching learner needs to aims." *ESP World* 1.14 (6). Accessed April 2, 2017 http://www.espworld.info/Articles_14/DESIGNING% 20ESP%20COURSES.htm.

Lakoff, Robin, *Language and Woman's Place: Text and Commentaries* (New York: Harper and Row Publishers, 1975).

Labov, William, *Sociolinguistic patterns* (Pennsylvania: University of Pennsylvania Press, 1972).

Laufer, Batia and Nation Paul, "A vocabulary size test of controlled productive ability." *Language Testing* 16 (1) (1999): 33-51.

Leki, Ilona, "Good writing: I know it when I see it," in Academic Writing in a Second Language, eds. Diane Belcher and George Braine (Norwood: Ablex, 1995), 23-46.

Liermann-Zeljak, Yvonne and Ferčec, Ivanka, "The importance of English in the education of electrical engineers," in Vistas of English for Specific Purposes, ed. Nadežda Stojković (Newcastle upon Tyne: Cambridge Scholars Publishing, 2015), 199-212.

Littlewood, William "Communicative and task-based language teaching in East Asian classrooms." *Language Teaching* 40(3) (2007): 243-249.

Loewen, Shawn, Li, Shaofeng, Fei, Fei, Thompson, Amy, Nakatsukasa, Kimi, Ahn, Seongmee and Chen, Xiaoqing, "Second Language Learners' Beliefs About Grammar Instruction and Error Correction." *The Modern Language Journal* 93 (1) (2009): 91–104.

McMillan, James and Jessica Hearn, "Student Self-Assessment: The Key to Stronger Student Motivation and Higher Achievement," *Educational Horizons* 87 (2008): 40-49.

Morgan, John and Rinvolucri, Mario, *Vocabulary* (Oxford: Oxford University Press, 2004).

Nation, I.S.P, *Learning vocabulary in another language* (Cambridge: Cambridge University Press, 2001).

Nevalainen, Terttu. "Language and Woman's Place in Earlier English." *Journal of English Linguistics* 30, 2 (2002):181-199.

Oxford, Rebecca, *Language Learning Strategies. What Every Teacher should know* (Boston: Heinle and Heinle, 1990).

Read, John, *Assessing vocabulary*. (United Kingdom: Cambridge University Press, 2000).

Rodriguez, Maximo and Sadowki, Mark "Effects of role, context, keyword, and context/keyword method on retention of vocabulary in EFL classrooms," *Language Learning* 50 (2) (2000): 385-412.

Schmitt, Norbert, *Vocabulary in language teaching* (Cambridge: Cambridge University Press, 2000).

Schulz, Renate, "Cultural differences in student and teacher perceptions concerning the role of grammar instruction and corrective feedback: USA-Colombia." *The Modern Language Journal* 85(2) (2001): 244-258.

Su, Ya-Chen "EFL teachers' perceptions of English language policy at the elementary level in Taiwan." *Educational Studies* 32(3) (2006): 265-283.

Thornbury, Scott, *How to teach vocabulary* (New Delhi: Pearson Education, 2002).

Trudgill, Peter, "Linguistic change and diffusion: Description and explanation in sociolinguistic dialect geography." *Language in Society* 3 (1974): 215-246.

Walters, JoDee, "Teaching the use of context to infer meaning: A longitudinal survey of L1 and L2 vocabulary research," *Language Teaching* 37(4) (2004): 243-252.

Wilkins, David Arnold, *Linguistics in language teaching* (London: Arnold, 1972).

Zimmerman, Cheryl Boyd, *Word Knowledge: A vocabulary Teacher's Handbook* (New York: Oxford University Press, 2009).

Zhou, Ally, "What adult ESL learners say about improving grammar and vocabulary in their writing for academic purposes." *Language Awareness* 18 (1) (2009): 31-46.