

The Use of Anglicisms in Speaking and Writing Among IT Students

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Abstract: *The evolution of IT has influenced the development of many other fields including language itself. This paper investigates the rate to which information technology students use original English terms from their domain compared to the transcribed versions (anglicisms) or translations in Serbian. The sample consisted of 96 first-year undergraduate IT students at Faculty of Technical Sciences, Čačak. Students' propensity towards the use of various forms of specific IT terms was analysed with the questionnaire specifically designed for this research. The results indicate that students prefer anglicisms in oral communication while they mainly use original forms of specified terms in written communication.*

Keywords: *borrowed words; loan words; English; preferences; IT.*

1. INTRODUCTION

Throughout the world, people tend to use modern and newly forged words in everyday speech. They also borrow words and terms from foreign languages.

Like many other phenomena, borrowing words from other languages can be observed from two points of view. Molnar [1] states that „a large quantity of borrowed words is considered as a positive phenomenon since it makes terminology systems in different languages understandable for specialists regardless of their nationality, enabling cooperation and development“. Her other point of view is that this phenomenon „leads to the loss of distinctness of national languages, which causes anxiety for many people“.

While older generations in Serbia in the past used Turkish terms, younger ones are oriented towards English. These borrowed words and terms are nowadays mainly recognized and applied in the field of information technologies (IT).

The advances in the realm of IT have had an impact on the development of many other fields including language itself. The absence of Serbian words for some IT terms or the lack of knowledge about official translations, results in the adoption of original English words without translation, called anglicisms, which also include idioms recognizable in English by pronunciation, morphology or spelling but are accepted in the dictionary of the target language [3].

IT vocabulary is standardized by International Organization for Standardization (ISO) in ISO/IEC 2382:2015 [2]. The vocabulary is defined by Technical Committee ISO/IEC JTC 1 however,

standardized IT words in English are not the main subject of concern in this paper. The authors were primarily aimed to the extent of use of anglicisms as compared to official Serbian equivalents.

2. RELATED WORK

There are many research papers focused on examining topics alike. The following ones are presented for the sole purpose of providing an insight into the variety of nations and domains dealing with this issue.

Molnar's research centres on the issue of English borrowed words used in the discourse of French Information Technology [1].

By presenting the role and position of English language in international criminal law Ristivojević [4] observed that determined speech characteristics also affect the judiciary.

In his paper which compared the use of Anglicisms in economic terminology in Serbian and Croatian, Silaški [5] speculates that „some of the domestic terms seem to have become *determinologised*, while new terms are introduced in a chaotic manner, according to personal preferences of authors“.

Ariyati [6] states that society in general should be aware of the practical use of English loan words in Indonesian observing thereby that IT people spell and write all the English borrowed words correctly.

Ćirić-Duvnjak [7] demonstrates the means and the extent to which anglicisms are integrated and incorporated in Serbian sports terminology. She also clarifies that our national identity is not at risk by an inflow of new, foreign words into the language ie its sports terminology.

Francuski [8] analyses the influence of English on the Serbian language in the domain of electronic media and informatics pointing up the absence of adequate equivalents in Serbian language in respective domains.

In their paper, Milanović & Milanović [9] suggest that names of the most wanted occupations published on the Internet appear as anglicisms.

Mavrić [10] points out that borrowing words from another language can lead to "narrowing of the semantic field in relation to the semantic possibilities of the lexeme in the original language". In addition, the author highlights the fact that borrowed words may develop new meanings different from the original ones in English.

In his paper, Stojkanović [11] analyses linguistic metaphors in computing in Serbian and English. The author describes similarities in metaphors in both languages and explains the procedure giving the example of malicious software terminology in both languages. He also argues that "English as IT language influenced the conceptualization of computer virus in Serbian as well".

The main goal of this research was to determine IT students' preferences in oral and written communication in terms of the use of english and serbian words in their respective domains.

3. METHODOLOGY

Based on the above stated goals of the research proposed, the following hypotheses were established:

- Students tend to use foreign terms in the field of IT as well as in general (everyday) communication.
- There is a positive correlation between the frequency of use of foreign terms in the field of IT and the use of IT in leisure time.
- There are differences in the frequency of use of anglicisms between students who attended different educational profiles in high school.

The sample consisted of 96 first-year undergraduate IT students at Faculty of Technical Sciences, Čačak, University of Kragujevac. Out of this number, 74 were male and 22 female students. Table 1 shows the structure of the sample according to previously completed high school. Less than 10% of students did not provide data about their previous education.

The research was conducted at the beginning of March 2020.

Online questionnaire, specially designed for this research, was used to gather the data. Besides questions about preferences of use of serbian or english IT terms, it contained questions about gender and previous education, as well as those about the use of IT in leisure time. There were 2

main parts of the questionnaire which served to analyse the topic in 2 different manners – propensity to use english or serbian IT terms in oral and written communication. Each part consisted of 12 questions – 12 offered words from IT domain in english and their appropriate serbian translations.

Table 1. Educational profiles which students attended in high schools

Educational profiles	% of students
Information technologies	15.6
Economy	12.5
Gymnasium	16.7
Electrical engineering and computer science	24
Road traffic	1
Tourism	3.1
Medicine	3
Mechanical Engineering	5.2
Mehatronics	4.2
Architecture	2.1
Computing Gymnasium	3.1
Computer networks	1

4. RESULTS AND DISCUSSION

To determine the percentage of students that use anglicisms in the field of IT and in general communication, descriptive statistics was applied. The majority of students stated that they use anglicisms in everyday speech (95.8%). Table 2 shows the percentage of use of IT terms in oral and written communication.

Table 2. Representation of IT terms in oral and written communication

IT term	Oral communication	Written communication
	% of students	
computer	71	43.8
file	93.8	100
folder	97.9	97.9
browser	76	79.2
online	96.9	93.8
screenshot	96.9	94.8
screencast	26	41.7
string	91.7	91.7
taskbar	83.3	86.5
desktop	99	97.9
display	16.7	18.8
pointer	31.3	54.2
N = 96		

The results from Table 2 indicate that the use of anglicisms is very common in oral and written communication among IT students. Certain

expressions such as "screencast" and "pointer" are more used in written communication. In contrast, the word "computer" is more frequently used in oral communication, while the term "display" is the least used in both types of communication. This may be due to the fact that this term has an adequate and very commonly used Serbian word.

Most popular anglicisms in the field of IT in German-speaking area are computer, link and tool [12]. In order to determine general frequency of use of anglicisms in the field of IT, one of the questions was an assessment scale with offered answers in range from 1 (very rare) to 5 (very often). The results are given in Table 3.

Table 3. Frequency of use of anglicisms in the field of IT

Grades	% of students
1	1
2	13.5
3	37.5
4	33.3
5	14.6
N=96	

Most students rated the frequency of use of anglicisms with grades 3 and 4. The percentage of students who use anglicisms very rarely, rarely and very often is almost equal.

Frequency of use of IT in general language is presented in table 4. It can be noticed that the largest percent of students often use IT in general language (57.3%), while 15,6% of students use it rare.

Table 4. Frequency of use of IT in leisure time

Grade	% of students
1	1
2	14.6
3	27.1
4	40.6
5	16.7
N=96	

Pearson's test determined moderate positive correlation ($r = 0.55^{**}$, $p = 0.00$) between the frequency of IT application in general language and use of anglicisms in this area.

Table 5 shows the results of comparison of IT terms used in written communication between students whose previous education was in areas of information technologies (IT) and electrical engineering and computer science (CE) and all other areas listed in table 1. Every term was offered in three forms: (1) original english word, (2) anglicism, (3) serbian word, whereas several anglicisms are written the same way like original english words. Those terms are written in italic.

Table 5. IT terms used in written communication – comparison of different previous education

IT terms (1. english word, 2. anglicism, 3. serbian word)	IT/CE (%)	Other fields	Pearson Chi-Square value	p	Phi/Cramers' V
1. Computer	21.1	24	0.886	0.642	0.1
2. Kompjuter	52.6	58			
3. Računar	23.3	18			
1. File	94.7	98	0.059	0.576	-0.089
2. Fajl	5.3	2			
3. Datoteka	0	0			
1. Folder	94.7	100	0.844	0.184	-0.175
3. Direktorijum	5.3	0			
1. Browser	60.5	61.2	0.542	0.762	0.079
2. Brauzer	15.8	20.4			
3. Veb-pregledač/čitač	23.7	18.4			
1. Online	57.9	76	8.979	0.011	0.319
2. Onlajn	26.3	24.4			
3. Na mreži	15.8	0			
1. Screenshot	26.8	46.9	5.864	0.053	0.261
2. Screenshot	35.1	53.1			
3. Snimak ekrana	8.1	0			
1. Screencast	39.5	26.5	4.996	0.082	0.240
2. Skrinkast	2.6	16.3			
3. Video-snimak ekrana	57.9	57.1			
1. <i>String</i>	92.1	90	0.000	1.000	0.036
3. Niska	7.9	10			
1. <i>Task bar</i>	78.9	90	1.309	0.225	-0.154
3. Traka sa zadacima/Linija poslova	21.1	10			
1. <i>Pointer</i>	44.7	58	1.037	0.282	-0.132
3. Pokazivač miša	55.3	42			
1. <i>Desktop</i>	94.7	100	0.844	0.184	-0.175
3. Radna površina	5.3	0			
1. Display	18.4	20	0.000	1.000	-0.020
3. Ekran	81.6	80			

No statistically significant differences between two groups of students were established (all p values are greater than 0.05) for almost all the terms in sense of written communication. The only statistically significant difference was noted for the term "online" ($\chi^2(2, n = 96) = 8.98, p = 0.01, \Phi = 0.32$). Students from vocational schools other than IT and CE major more often use English word "online" compared to another group of students. It can be concluded that previous education has no influence on the use of various forms of IT terms.

The reason for this may be due to the fact that the offered anglicisms are in wide use in everyday speech. It can also be noticed that students tend to use words in original english form rather than their transcribed (anglicism) version. Exceptions are words "computer" and "screenshot" which are more

used in their transcribed forms by both groups of students.

Vuletić et al. [13] also discovered that dentistry students prefer the use of anglicisms in their respective domain.

Table 6 shows the results of comparison of IT terms used in oral communication among students whose previous education was in areas of information technologies (IT) and electrical engineering and computer science (CE) and all other areas listed in table 1. Since there is no difference in pronunciation between anglicisms and original terms in english, every term was offered in two forms: (1) anglicism and (2) serbian word, whereas several terms have more than one translation in Serbian.

Table 6. IT terms used in oral communication – comparison of different previous education

IT terms (1. anglicism, 2., 3. serbian word)	IT/CE (%)	Other fields	Pearson Chi-Square	p	Phi/Cramers' V
1. Kompjuter (engl. Computer)	78.9	68	0.811	0.335	0.122
2. Računar	21.1	32			
1. Fajl (engl. File)	94.7	92	0.006	0.695	0.054
2. Datoteka	5.2	8			
1. Folder (engl. Folder)	94.7	98	2.811	0.354	0.154
2. Direktorijum	0	2			
3. Fascikla	2.6	0			
1. Brauzer (engl. Browser)	76.3	74	3.931	.203	.190
2. Veb-pregledač	18.4	26			
3. Veb-čitač	5.3	0			
1. Onlajn (engl. Online)	97.4	96	0.000	1.000	0.037
2. Na mreži	2.6	4			
1. Screenshot (engl. Screenshot)	92.1	100	2.041	0.077	-0.215
2. Snimak ekrana	7.9	0			
1. String (engl. String)	89.5	92	0.001	0.722	-0.044
2. Niska	10.5	8			
1. Taskbar (engl. Taskbar)	68.3	80	0.878	0.654	0.098
2. Traka sa zadacima	7.9	14			
3. Linija poslova	5.3	6			
1. Desktop (engl. Desktop)	100	98	0.000	1.000	0.093
2. Radna površina	0	2			
1. Displej (engl. Display)	15.8	18	0.000	1.000	-0.029
2. Ekran	84.2	82			
1. Screenshot (engl. Screenshot)	18.4	32	1.419	0.221	-0.153
2. Video-snimak ekrana	81.6	68			
1. Pointer (engl. Pointer)	31.6	30	0.000	1.000	0.017
2. Pokazivač miša	68.4	70			

The results indicate that students mainly prefer anglicisms in oral communication. Terms „screenshot" and „pointer" are rather used translated which is in line with findings for written communication (table 5). The same finding goes for the term „display".

No statistically significant differences between two groups of students were established (all p values are greater than 0.05) in terms of use of anglicisms in oral communication.

5. CONCLUSION

The hypothesis which suggests that students tend to use foreign terms in the field of IT and in general communication was confirmed, which is undoubtedly due to the influence of media, social networks, and persistent immersion in English language.

Accordingly, the hypothesis about the connection between frequency of computer use in leisure time

and propensity of students to use anglicisms and English terms in the field of IT was also confirmed.

Differences in the frequency of use of anglicisms between students who attended different educational profiles in high school were not established. Thus, the last hypothesis was not confirmed. It can therefore be concluded that the examined terms are widely used in everyday communication.

The future work on this issue will be aimed towards detailed analysis of means by which anglicisms are integrated and incorporated into Serbian IT terminology. Additionally, it would be useful to examine the impact of professional environment of respondents in several fields with broader list of specific IT terms.

It should be noted that the sample for this research was made up of first year students only which implicates that studies could not influence the results in a way if the sample was made up of students from higher study levels. This fact will also be included in the plans for the future work.

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