E·S·P·Today
JOURNAL OF ENGLISH FOR SPECIFIC PURPOSES AT TERTIARY LEVEL

Daniela Matić*

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture
University of Split, Croatia
daniela.matic@fesb.hr

ATTITUDES OF COMPUTER SCIENCE STUDENTS TO THE ENGLISH ELEMENT IN CROATIAN ICT MAGAZINES

Abstract

The paper focuses on the results of a questionnaire presented to the first-year computer science students who have *English in computing 1* and *English in computing 2* as mandatory courses in their curriculum. The questionnaire, containing a number of Anglicisms and expressions excerpted from Croatian information and communications technology (ICT) magazines, was designed in order to study the students' attitude toward the use of English in such magazines and toward their native language. The aim of this paper was to find answers to the following research questions: (1) what is the students' attitude toward the English element in Croatian ICT texts with respect to the level of its adaptation and integration into Croatian; (2) how high is the students' awareness of formal and informal registers; (3) what is their attitude toward Croatian computer terms; and (4) do their attitudes support certain common misconceptions concerning the use of English and Croatian in ICT discourse? The results of our research show that the English element and unadapted forms in ICT magazines are on average not only accepted but preferred among students, whereas Croatian adaptations of Anglicisms are dispreferred.

Key words

Anglicisms, Croatian, ICT terminology, acceptability, integration, students' attitude.

* Corresponding address: Daniela Matić, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, Ruđera Boškovića 32, 21000 Split, Croatia.

Sažetak

U radu se bavimo rezultatima istraživanja na osnovu anketnog upitnika kojim su ispitani studenti prve godine računarstva i koji imaju *Engleski u računarstvu 1* i *Engleski u računarstvu 2* kao obavezne predmete u programu studija. Upitnik, koji je sadržavao anglicizme i neprilagođene izraze s engleskim elementom ekscerpirane iz hrvatskih časopisa za informacione i komunikacione tehnologije, upotrebljen je da bismo proučili stavove studenata prema upotrebi engleskog elementa u tim časopisima i prema hrvatskome jeziku kao njihovom maternjem jeziku. Cilj istraživanja bio je da se dobiju odgovori na sledeća pitanja: (1) kakav je stav studenata prema engleskome elementu u hrvatskim tekstovima o informacionim i komunikacionim tehnologijama s obzirom na nivo njegove prilagođenosti i uklopljenosti u hrvatski standardni jezik; (2) koliko su studenti svesni postojanja formalnih i neformalnih registara; (3) kakav je njihov stav prema hrvatskoj računarskoj terminologiji; i (4) podržavaju li njihovi stavovi neke uobičajene zablude u vezi upotrebe engleskog i hrvatskog u diskursu informacionih i komunikacionih tehnologija. Rezultati našeg istraživanja pokazuju da su među studentima engleski element i neprilagođeni oblici u proseku ne samo prihvatljivi nego i poželjniji, dok su oni anglicizmi koji su bolje prilagođeni hrvatskom standardnom jeziku manje poželjni.

Ključne reči

anglicizmi, hrvatski jezik, terminologija informacionih i komunikacionih tehnologija, prihvatljivost, integrisanost, stav studenata.

1. INTRODUCTION

Journalistic style is one of the five "functional styles", as they are called in Slavic stylistics studies, of the standard Croatian language (Silić, 2006). This term is similar but not equal to register, defined by some linguists as "situationally defined varieties" (Biber, Johansson, Leech, Conrad, & Finegan, 1999: 5) or as "functional variety of language" (Halliday & Matthiessen, 2004: 27). The substyle of printed or online computer magazines may be referred to as technology journalism or, to be more precise in our case, information and communications technology (ICT) journalism. This journalistic substyle is heavily marked with the English element, mostly in the form of ICT terms, which enter the Croatian language very fast. This intensive process often does not give computer experts and especially Croatian linguists, who usually want to act in accordance with the predominantly purist language policy (Barić et al., 1999: 106; Nikolić-Hoyt, 2005: 180), sufficient time to

adapt them to Croatian or to find an appropriate Croatian equivalent (Sočanac, 2010: 89). Thus, many English words remain unadapted (Stojaković, 2004; Stojaković & Malčić, 2006). On the other hand, the number of ESL speakers in Croatia has risen in the last few decades, as well as the level of their communicative competence, so that many English words are not perceived as a foreign element and unadapted forms are retained as a result (Nikolić-Hoyt, 2005: 183).

Croatian ICT magazines treat a number of topics from the world of computer science, ICT research and development, communications technology and digital and electronic devices through some of the usual journalistic forms, these being articles on various technology topics and reports (e.g. from a computer fair), reviews (e.g. on products), news (e.g. on breakthroughs), analysis and comparison (e.g. of products). These magazines can also present some more personalized articles, which may include the author's experience with some product and their opinion, but on average, magazine texts in the abovementioned genres are supposed to be informative and written with neutral, non-figurative language devices if they are to be as objective as possible (Silić, 2006: 77; Hudeček & Mihaljević, 2009: 29). The audience of magazines which have adopted this style are not only ICT experts but also people interested in information technology and communications for various reasons. Magazines are available in their printed and digital form and are accessible online to those interested in technology.

ICT terms may be treated as jargon; however, these terms tend to quickly gain popularity, since they can reach a wider audience of readers, not only ICT experts. As Mihaljević (2003) states (see also Halonja & Mihaljević, 2012: 53), ICT jargon shares some features with professional jargons: it is spoken by tightly closed groups of ICT experts, but it rapidly enters the language of ordinary computer and information technology users, so that at least some terms, which have been of restricted usage, eventually enter everyman's vocabulary. This fact can result in a conflict between the norms of a standard language, which often tend to be of conservative nature, and the jargon, which provides its users with practical expressions but challenges a standard language with its lack of compliance with norms.

In this paper we focus on the results of a questionnaire presented to the first year computer science students who have *English in computing 1* and *English in computing 2* as mandatory courses in their curriculum at the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, Croatia. The aim of the paper was to find answers to the following research questions: (1) what is the students' attitude toward the English element in Croatian ICT texts with respect to the level of its adaptation and integration into Croatian; (2) how high is the students' awareness of formal and informal registers; (3) what is their attitude toward Croatian ICT terms; and (4) do their attitudes support certain common misconceptions concerning the use of English and Croatian in information technology discourse, as reported by Mihaljević (2006, 2007)?

2. LANGUAGES IN CONTACT AND THE PROCESS OF BORROWING

Language borrowing is a process resulting from social and cultural contacts of two or more language communities. The reasons why languages accept new words from other languages are often extra-linguistic (Filipović, 1986; Nikolić-Hoyt, 2005: 179-180; Sočanac, 2005) and quite practical. In a country which plays a prominent role in science, technology, or cultural and social processes, inventions, new procedures, improvements and breakthroughs are named and termed by tapping the lexical sources of its national language(s). Such a country will not be only technologically or culturally influential and perceived as a leader or a trendsetter, but also linguistically influential since it will export its lexical innovations to other countries whose national languages are different and diverse. Consequently, the language of such a country becomes prestigious among speakers of other, less scientifically, technologically or culturally influential countries. The prestige may partly explain why borrowing takes place, because in fact "all languages have the means to create novel expressions out of their own resources" (Haspelmath, 2009: 35).

The contacts between nations are nowadays easily established and sustained through modern means of communication and when a concept has to be named and called in a language which has not yet produced its own lexical item, three procedures may be applied: (1) a word may be borrowed from the language which already has a name for a new and most often technological concept, what is called cultural borrowing; (2) a new word may be translated from a foreign language and coined from the existing morphemes; or (3) the meaning of the existing word may be changed, expanded or narrowed (Filipović, 1990: 15), all of which are studied within the field of Contact Linguistics.

Of these three procedures, lexical borrowing is central to this paper. Borrowing is a process, but may also be "defined as a word that at some point in the history of a language entered its lexicon as a result of borrowing (or transfer, or copying)" (Haspelmath, 2009: 36). The model, i.e. the word as it is written and pronounced by native speakers, enters another language, thus becoming a replica. If the term keeps certain features of the giving language and is only partially adapted, it becomes the compromise replica (Filipović, 1986: 38; Sočanac, 2005: 11-14). This stage is temporary, at least theoretically, but some words retain the form of a compromise replica or foreign loan. One or the other, or both orthography and pronunciation, are taken into consideration when analyzing the borrowed word (Filipović, 1990: 26), since its phonological realization in the receiving language is the result of the interaction of these two factors. Orthography is very often prioritized, the reason being the fact that most new expressions enter the receiving language through written media (especially in ICT). In some cases "adaptation varies, depending on the age of a loanword, knowledge of the donor language by recipient language speakers, and their attitude toward the donor

language. If the donor language is well-known and/or the loanword is recent, recipient language speakers may choose not to adapt the word in pronunciation" (Haspelmath, 2009: 42). However, not only structural factors, but also language policy, current language practice and general attitude of the speech community toward the language will direct adaptation and integration processes.

Words borrowed from English may also remain unadapted; however, if they are adapted and integrated at various stages, they become Anglicisms. First accepted as foreign words, they undergo certain orthographic, phonological and morphological adaptations in the receiving language in order to become loanwords (Filipović, 1990: 16). This means that English phonemes and morphemes are substituted by Croatian ones in the processes of transphonemization and transmorphemization (Filipović, 1986: 68).

In Filipović's opinion or experience (1990: 50), if the word appears only in its English orthography, the pronunciation of the English model is then "croatized", and such "croatized" pronunciation of the borrowed word indicates the degree of adaptation. Since we do not and cannot know how immediate ICT users pronounce these expressions, we can only theoretically support Filipović's opinion that the Anglicism may be orthographically unadapted but that its pronunciation should be adapted to Croatian as much as possible. The question which is left unanswered is whether the words which appear unadapted in their base form and mostly in print should be categorized as foreign words or as Anglicisms.

Many ICT terms which have recently (in the past twenty or twenty-five years) entered Croatian have kept their original orthography and are, by and large, unadapted. Nikolić-Hoyt (2005: 181, 189) finds it necessary to rethink the definition of "Anglicism", which normally implies adaptation and integration of an English word into the receiving language, since a large number of terms, in our case ICT terms, have not undergone these processes and are not "real" Anglicisms. Therefore, the definition of "Anglicism" should be either expanded so as to encompass unadapted words, or it should remain as it is, in which case unadapted terms should be regarded as foreign words. Still, some foreign words never reach the status of Anglicisms simply because they have entered the receiving language for a fashionable reason or to cater for a restricted group of professionals and then disappear without having been adapted and integrated (Sočanac, 2005: 10).

In this paper we studied words imported from English which have become part of Croatian computer jargon and have been adapted in various ways, but which have entered one particular "functional style", and which have been treated there, as it were, in a nondiscriminatory way, to other Croatian words. In ICT magazines which served as a source of data, the words which were not adapted to Croatian were not italicized, underlined, bolded or marked with any graphical tool.[1] These words also cannot be labeled "Anglicisms" in every single case, since many of them have not been changed in any respect, except for certain

[1] One of the magazines, however, did have a proofreading and editing service.

morphological adaptations, and this is the reason why we use the expression "the English element" throughout the paper.

3. RESEARCH METHODOLOGY

In this section we describe the research methodology we used with our participants, as well as the research instrument – a purposely designed questionnaire.

3.1. Participants

The participants in this research were 78 first-year computer science students of the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture at the University of Split, 60 of them male (76.92%) and 18 female (23.08%). The age range of the students was between 18 and 25, most of them being at the age of 19 (67.94%). A majority of students had attended grammar high school (86%), as opposed to 14% of them coming from various secondary vocational schools. The majority of students (60 of them, 76.92%) studied English in regular school courses, while 18 of them (23.08%) took additional private courses. All students had English as a mandatory course in their secondary education.

3.2. Research instrument

For the purposes of this research a two-part questionnaire[2] was prepared. The first part contained questions[3] related to sociodemographic variables (gender, age, completed secondary education) and the students' attitude toward their knowledge of English, English studying habits and the ways of acquiring new information on ICT. The second part of the questionnaire, titled *Language questions*, comprised questions on ICT English element realized as various parts of speech and the students' attitude toward it in terms of the level of its acceptability in the Croatian language (Mihaljević, 1993). The data were sampled from the ICT magazines *PC-CHIP* (4 issues, 223-226, published in 2014) and *VIDI* (4 issues, 209-213, published in 2013), which can be accessed in their digital form through the www.edu.hr website, part of the Croatian academic research network (CARNet). The magazines can also be found in their printed form in usual points of sale throughout the country.

The last part of the questionnaire included ten statements commonly heard among non-linguists about Croatian and English in ICT, with which the students were supposed to agree or disagree. The questionnaire was anonymous and written in

[2] The questionnaire, translated into English by the author, is provided in the Appendix.
[3] Some students did not answer all the questions: they either skipped them or could not decide, therefore the total number of answers and students may not always match.

Croatian in order to avoid any language misunderstandings. The students took between thirty to forty-five minutes to complete it. The statistical analysis was done in the open source R software.

4. RESEARCH

The questionnaire was presented to the students two weeks before the end of the 2013/14 Spring semester and their academic results for the *English in computing 1* course had already been recorded in the range from 2 (the lowest passing grade) to 5 (the highest passing grade), which they had to write down (Table 1):

GRADE	FREQUENCY OF GRADES	PERCENTAGE
2	1	1.28
3	19	24.36
4	35	44.87
5	23	29.49
Total	**78**	**100.00**

Table 1. Students' grades, grade frequency and percentage

In the questionnaire the students were also asked to rate themselves according to the Common European Framework of Reference (CEFR), which they had been introduced to prior to filling out the questionnaire (see Fig. 1). The document with the Croatian version of the CEFR scale was projected onto the screen and remained there for reference during the poll.

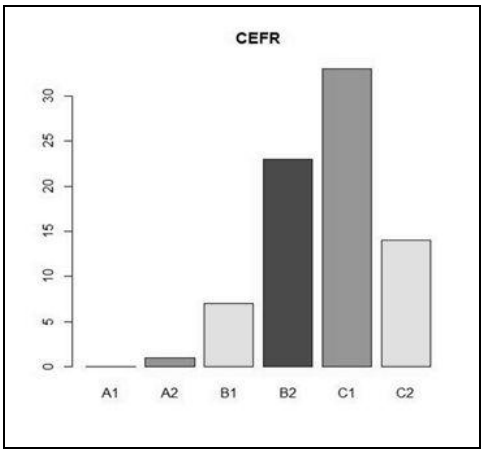

Figure 1. Students' perception of their knowledge of General English according to the CEFR

According to the questionnaire results, those students who had a higher grade in the *English in computing 1* course rated their General English knowledge high on the CEFR scales, which is shown in Table 2.

STUDENTS' GRADES IN *ENGLISH IN COMPUTING 1* COURSE	CEFR						TOTAL (GRADE)
	A1	A2	B1	B2	C1	C2	
2	0	0	1 (1.3%)	0	0	0	**1**
3	0	1 (1.3%)	2 (2.6%)	11 (14.1%)	5 (6.4%)	0	**19**
4	0	0	4 (5.1%)	8 (10.3%)	16 (20.5%)	7 (9%)	**35**
5	0	0	0	4 (5.1%)	12 (15.4%)	7 (9%)	**23**
TOTAL (CEFR)	0	1	7	23	33	14	**78**

Table 2. Correlation of students' English language computer science 1 grades and self-perceived CEFR grades for General English

The students who had obtained grade 3 in their *English in computing 1* course mostly rated themselves as B2 category, grades 4 and 5 correspond mostly to C1 and C2 category for a total of 53.9% of students and nobody rated themselves as A1. This shows that the students see themselves as highly proficient, even in language skills that are not tested in the course. The level of language competence influences the permissiveness toward the English element in the receiving language and the lower degree of its adaptation in such a way that more competent speakers of English will have a more relaxed attitude toward English expressions and unadapted forms (Nikolić-Hoyt, 2005: 183, 203).

Finally, most of the students (87.17%) encounter no difficulty reading computer science literature in English and the language of their Internet search is most frequently English (for 70.51% of the students), the reason being that texts in English are, as they say, "more available" in comparison with those written in Croatian. This is conflicting with the fact that at least two Croatian ICT magazines can be accessed in their digital form on the www.edu.hr website.

The final part of the questionnaire, which is central to our research, contained a number of language expressions extracted from a data collection excerpted from eight recently published issues of *PC-CHIP* and VIDI, from the first to the last page. The data collection contains borrowed nouns, verbs and adjectives, then loan translations, semantic and syntactic calques, numerical expressions combined with nouns which follow the English syntactic model, Croatian equivalents and sentences which exemplify code-switching between Croatian and English, etc. As will be seen in the following sections, the material was classified according to the types of speech. In order to test their acceptability among the students, we selected a fraction of the excerpted examples (singular and plural nouns and adjectives) at various stages of adaptation to the standard Croatian language at the phonological, orthographical and morphological levels, as well as those left unchanged in their original English form.

4.1. The preferred level of formality

The first of the language questions in the questionnaire was related to the level of writing formality: writing a formal paper (e.g. a clearly structured research or topic paper, an essay, or a review) in Croatian for academic or professional purposes requires the use of specialized vocabulary along with complete and clear sentences which are used to develop or convey ideas within the text. Therefore, the first of the language question asked the following: if the students were writing such a paper, they would have to choose one of the terms offered to them in their English form (column A), a phonologically and morphologically adapted form (column B), a hybrid form consisting of one English and one Croatian word (column C), and a Croatian equivalent (column D). Some boxes in the table are left blank since not all forms could be found in the data collected from the magazines. Table 3 shows the students' response:

A ENGLISH FORM	No. of students	B ADAPTED FORM	No. of students	C HYBRID	No. of students	D CROATIAN EQUIVALENT	No. of students
smartphone	25	smartfon	3	smartphone uređaj	22	pametni telefon	28
hardware	40	hardver	30	/	/	sklopovlje	8
touchscreen	36	/	/	/	/	dodirni ekran/ zaslon osjetljiv na dodir	38
smartwatch	40	/	/	smart sat	1	pametni sat	36
web browser	13	/	/	web preglednik	64	/	/
laptop	28	/	/	/	/	prijenosno računalo	50
39%		**7%**		**19%**		**34%**	

Table 3. Students' preferences for terms used for writing a formal paper

In most cases (39%) the students chose English forms, which were almost never marked as foreign words in any of the magazines texts. They also rather frequently chose Croatian equivalents (34%), except for the case of *sklopovlje* (the Croatian equivalent of *hardware*, which has not caught on) and the hybrid form *web preglednik*. Adapted and hybrid forms, at least in these cases, do not seem to be as acceptable as English or Croatian expressions. This number of parallel expressions we found was very restricted; however, the results may be indicative of certain trends in student population.

If we correlate the grades in *English in computing 1* and one example of the offered expressions they chose to be appropriate for formal writing, we can see the results obtained in Table 4 below.

EXPRESSION	GRADE IN *ENGLISH IN COMPUTING 1*				
	2	3	4	5	TOTAL (STUDENTS' CHOICES)
smartphone	0	5 (6.41%)	12 (15.38%)	8 (10.26%)	25
smartfon	0	1 (1.28%)	1 (1.28%)	1 (1.28%)	3
smartphone uređaj	1 (1.28%)	4 (5.13%)	9 (11.54%)	8 (10.26%)	22
pametni telefon	0	9 (11.54%)	13 (16.67%)	6 (7.69%)	28
TOTAL (STUDENTS' GRADES)	1 (1.28%)	19 (24.36%)	35 (44.87%)	23 (29.49%)	78 (100%)

Table 4. Correlation of the selected expressions and grades

The results show that even the students whose academic results indicate that English as a foreign language or *English in computing 1* is not their favorite course (those with grade 3) also opted for the English expression (6.41%), although the Croatian equivalent was their most frequent choice (11.54%). Those students, however, whose academic results show a higher proficiency in English, were almost equally inclined to the English form and the Croatian equivalent. The adapted form proved to be the least popular choice with all students, regardless of their grade in *English in computing 1*.

When the same expressions were correlated with the question on the preferred language in the students' Internet searches for ICT texts, the following results are obtained (see Table 5).

EXPRESSION	LANGUAGE		Total (selected expression)
	CROATIAN	ENGLISH	
smartphone	7 (8.97%)	18 (23.4 %)	25
smartfon	3 (3.85%)	0	3
smartphone uređaj	6 (7.69%)	16 (20.8 %)	21
pametni telefon	8 (10.26%)	20 (26 %)	28
Total (preferred language)	24 (30.77%)	54 (69.23%)	78 (100%)

Table 5. Correlation of expressions and preferred language

The correlation shows that even those students who prefer Croatian in their Internet searches for ICT texts chose the original English expression *smartphone*, except for a small number (3.85%) of those who prefer phonologically and morphologically adapted form *smartfon*. However, the two-word Croatian expression *pametni telefon*, even though longer than the English expression, has gained popularity and is the most frequently selected form in both groups. Judging from the results displayed in Tables 4 and 5, it seems that either unadapted English words or their Croatian equivalents are perceived as acceptable at the formal level, unlike adapted Anglicisms or hybrid forms, which were opted for less frequently.

4.2. The preferred level of acceptability

The computer science students are some of immediate users of ICT terminology, both in English and Croatian. The next language question in the questionnaire, *Do you find the following forms of Anglicisms acceptable in the standard Croatian?*, tested the level of acceptability (Mihaljević, 1993: 123-124) of Anglicisms found in the ICT magazines at various levels of adaptation by using a 5-point Likert scale (totally unacceptable-1, mostly unacceptable-2, neither acceptable nor unacceptable-3, mostly acceptable-4, totally acceptable-5), number 1 indicating the lowest degree of acceptability, and number 5 the highest. The terms are used in computer jargon, but they have also entered the register of ICT journalism. What we wanted to establish with the computer science students, native speakers of Croatian, was the following: according to their language intuition, did they perceive the form of excerpted expressions as foreign to Croatian, or as integrated into the standard language?

Most of the expressions are nouns, which is compliant with the main reason for borrowing – naming new concepts. The analysis starts with the citation form of nouns, morphologically neutral. Table 6 shows students' choice as to the degree/level of acceptability for a number of Anglicisms – **nouns** in **singular**, phonologically and morphologically partially adapted.

EXPRESSION	LEVEL OF ACCEPTABILITY					AVERAGE
	1	2	3	4	5	
kompajler	1%	1%	14%	37%	46%	4.26
kontroler	10%	10%	18%	24%	37%	4.03
hosting	4%	10%	22%	36%	28%	3.74
gejmer	10%	10%	18%	24%	37%	3.67
tutorijal	5%	14%	35%	23%	23%	3.45
rauter	24%	21%	22%	17%	17%	2.81
ekstruder	28%	32%	28%	8%	5%	2.26

Table 6. Acceptability of partially adapted **singular nouns**

The level of adaptation and integration shows that these nouns have been in circulation for a certain period. Since they have been transphonemized to various degrees, the orthography of these expressions may prove how such words are read and pronounced by immediate users. Except for the two examples (*ekstruder*, *rauter*), the students find most of the expressions acceptable in their present form of compromise replica. The difference in students' preferences as to the level of acceptability, manifested in different ratings given to individual words, is probably related to the frequency of some of the expressions in the texts they read in Croatian magazines or on the Internet.[4]

However, some of the nouns in Table 6 have already been translated into Croatian and formed with Croatian lexical items. Thus in Kiš (2000),[5] the following English nouns are found as dictionary entries along with their Croatian equivalents: *compiler*, as opposed to 'prevodilac', 'prevoditelj', 'programski

[4] In order to show to readers and speakers of languages other than Croatian and its cognates to what degree these forms differ from original English nouns (in the order they are listed in Table 6, they are 'compiler', 'controller', 'hosting', 'gamer', 'tutorial', 'router', 'extruder') we explain what the process of adaptation consists of and what features have changed in reference to the English model. In some of the above examples transphonemization is achieved following English pronunciation and orthography (*kompajler*, *kontroler*, *gejmer*, *tutorijal*, *rauter*, *ekstruder*). In some cases transphonemization is free, e.g. in diphthongs, which are substituted by two vowels in Croatian (*kompajler*, *gejmer*, *rauter*). It is, however, partial in monophthongs and consonants which have a different place of articulation in Croatian (*kontroler*, *tutorijal*, *ekstruder*) (Filipović, 1986:74-76), that is, vowels and consonants receive Croatian pronunciation often based on English orthography and not phonology (*-er*, pronounced as /ə/ in English, is pronounced as /er/ in Croatian), and are represented by graphemes which correspond to Croatian phonemes. English graphemes which do not have an equivalent in Croatian are replaced by graphemes of similar pronunciation (*extruder* – *ekstruder*). Transphonemization may also be achieved following English orthography only, e.g. in *hosting*, where the orthography is retained, although English and Croatian pronunciations do not match since the English monophthong /t/ has to be substituted partially, while the diphthong /əʊ/ and the velar /ŋ/ are substituted freely by one phoneme /o/ and /n/ and /g/ respectively. The transphonemization creates new consonant clusters due to pronunciation (mid-position *ekstruder*, *gejmer*, *kompajler*) or orthography (*hosting*), which are imported into Croatian.

As to the morphological adaptation of these singular nouns, we cannot say that the transmorphemization has been finished since they retained English morphemes *–ing* (for the gerund form) and *-er* (for the agent) and have the status of compromise replica. Still, it is rather unlikely that these nouns will ever receive Croatian suffixes to denote the agent, e.g. *-lac*, *-ač* or *-telj*. English derivational suffixes may be perceived as importation and innovation in the receiving language morphology (Filipović, 1986: 122; Filipović, 1990: 32), and their temporary status will become permanent, but this yet remains to be confirmed since some of these nouns are a novelty in Croatian and represent new concepts. They have entered one particular niche of journalistic style and have not become widespread yet.

[5] In the preface to this dictionary, its chief editor Verica Zorić points out that "[o]ne exceptional feature of this lexicographical project is that it aims to record the current state in Croatian information technology terminology, which makes this dictionary descriptive rather than prescriptive". This 1,416-page dictionary contains 22,813 English entries and 33,000 Croatian equivalents. The editors of the dictionary were assisted by seven professors from the Faculty of Electrical Engineering and Computing, University of Zagreb.

prevodilac', 'programski prevoditelj'; *controller*, as opposed to 'upravljački sklop', 'nadozornik'; *tutorial*, as opposed to 'program vodič', 'program priručnik'; *router*, as opposed to 'usmjerivač', 'usmjernik'. The very fact that these translations can be found in the dictionary dating back from 2000 shows that the extralinguistic referents are not new to the ICT experts in Croatia and that there had been sufficient time for Croatian language and ICT professionals to come up with language solutions that entered a dictionary. It can only be speculated why they have not been used by ICT journalists in our selection of magazines.

The question as to the level of acceptability also pertained to **nouns** in **plural** (see Table 7)**.**

LEVEL OF ACCEPTABILITY	1	2	3	4	5	AVERAGE
driveri	3%	1%	5%	30%	61%	4.4
streamovi	4%	4%	8%	27%	57%	4.2
gadgeti	5%	5%	10%	32%	47%	4.1
game developeri	4%	6%	23%	22%	45%	4.0
widgeti	5%	5%	12%	35%	43%	4.0
stickovi	1%	6%	17%	39%	36%	4.0
pluginovi	3%	4%	20%	30%	43%	4.0
geekovi	8%	5%	13%	23%	51%	4.0
webbrowseri	10%	8%	22%	21%	39%	3.7
fajlovi	8%	5%	13%	23%	51%	3.6
launcheri	4%	14%	29%	24%	28%	3.6
gameri	12%	9%	22%	21%	36%	3.6
overclockeri	8%	13%	26%	22%	31%	3.5
tooltipovi	12%	10%	36%	19%	23%	3.3
shaderi	9%	20%	23%	24%	24%	3.2
add-onovi	17%	19%	19%	22%	23%	3.2
teraflopsi	13%	18%	31%	17%	22%	3.2
shooteri	11%	13%	36%	14%	26%	3.2
flagshipovi	14%	22%	32%	19%	13%	2.9
frameworci	19%	27%	22%	17%	14%	2.8
benchmarci	18%	26%	27%	15%	14%	2.8
featuri	21%	33%	23%	13%	10%	2.6

Table 7. Acceptability of partially adapted **plural nouns**

It is evident from Table 7 that the students find these orthographically unadapted forms acceptable. The degree of acceptability is even slightly higher than in singular nouns, whose adaptation has reached a higher degree, but no pattern in their preferences, which could indicate certain regularity, can be established, that is, why the students found the form of e.g. *driveri* more acceptable than *shaderi*. The possible reason for their preferences could be a different frequency of these words in the texts the students come across and read. The plural noun forms, unfortunately, do not reveal the degree of phonological adaptation or how the students or other ICT users pronounce them. Strangely enough, among the four lowest rated compromise replicas of plural nouns there are two which are most morphologically adapted through sibilarization according to the rules of the standard Croatian. The reasons for such results could be possible unfamiliarity with these expressions or, alternatively, it may be the mixture of English and Croatian orthography that the students find unacceptable. Their attitudes are in compliance with the observation already quoted from Haspelmath (2009: 42), that "[i]f the donor language is well-known and/or the loanword is recent, recipient language speakers may choose not to adapt the word in pronunciation". The anonymous questionnaire, unfortunately, gives no opportunity to interrogate the respondents about the reasons for their choices and the respondents themselves, too, "may or may not be aware of the attitudinal factors that help to shape their linguistic choices" (Thomason, 2010: 38).[6]

As to Croatian translations, the following English dictionary entries (Kiš, 2000) have their Croatian equivalents or hybrid forms: *driver*, 1) 'pogonski sklop'; 2) 'pogonski program'; *web browser*, 'Web preglednik'; *file*, 'datoteka'; *launcher*, 'valovodni prilagodnik', 'ispaljivač'; *add-on*, 'dodatak', 'proširenje'; *framework*, 'okvir', 'sustav', 'sistem', 'poredak'; *benchmark*, 'sustav mjerenja ili standard'; *feature*, 1) 'osobina', 'obilježje', 'svojstvo', 'mogućnost'; 2) 'atribut ili razlikovna osobina koncepcije, predmeta ili objekta'. Entries such as *stream* or *plug-in* have been only defined and never translated by one- or multi-word equivalents. Other

[6] In most of these examples the English orthography has been retained and there are no indicators as to the pronunciation. The orthographic exception is *fajlovi*, the only plural noun that is orthographically adapted to Croatian, also phonologically adapted as a compromise replica, the diphthong being substituted by a vowel and a consonant, and morphologically adapted, since the word receives the inflectional suffixes. The word teraflopsi (which is derived from tera-, 10^{12}, and FLOPS, floating-point operations per second, abbreviated as FLOPS) is orthographically acceptable since it has no phoneme and grapheme combinations which would be foreign to the receiving language; it is partially phonologically adapted and morphologically as well since it receives the inflectional suffix.

However, these English plural nouns may acquire the status of compromise replica owing to the achieved degree of transmorphemization. Namely, inflectional suffixes are simply pasted to the English model, some of which retain the English suffix *-er*, some of them do not have them and in some cases the English words undergo sibilarization, becoming *frameworci*, *benchmarci*, where the velar /k/ changes into the sibilant /c/ before /i/. These examples show that the words morphologically function in computer texts.

English plural nouns could not be found in this dictionary. This fact could signify that some of these nouns refer to newer concepts for which no Croatian equivalent has been invented yet. On the other hand, some of these examples are General English words that have been added new meanings in the ICT context; however, the adaptation of most models has not resulted even in the status of compromise replica.

Adjectives, though rare, were also tested as to their acceptability with the computer science students (see Table 8).

LEVEL OF ACCEPTABILITY	1	2	3	4	5	AVERAGE
cross-platformski	14%	17%	24%	19%	26%	3.3
bugovita	23%	17%	23%	14%	23%	3.0
najgejmerskiji	41%	21%	18%	12%	9%	2.3
gađetirajuća	38%	27%	21%	6%	8%	2.2
smartfonoliki	44%	31%	10%	8%	8%	2.1

Table 8. Acceptability of partially adapted **adjectives**

The adjectives presented in Table 8 have been derived from borrowed nouns and formed according to the Croatian word formation rules and with derivational suffixes and inflectional prefix for the superlative form (*naj-*). They are the result of secondary adaptation after the type of speech has been changed (Filipović, 1990: 33) and they are morphologically integrated in Croatian. The results show that these adjectives have lower acceptability among the students compared to the nouns in the above Table 6 and Table 7 respectively. Three out of five adjectives most adapted phonologically and morphologically to the Croatian standard were found as the least acceptable of all (*najgejmerskiji*, *gađetirajuća*, *smartfonoliki*). *Cross-platformski*, a two–word hybrid form, of which the first part retained English orthography, had a highest rate of acceptability among the students, as well as *bugovita*, derived from the phonologically unadapted noun 'bug'.

On the one hand, the above examples show that the processes of transphonemization and transmorphemization are not always linear, consecutive and interdependent. On the other, they show that the higher the formal integration of words into Croatian, the lower the degree of their acceptability among the computer science students.

Finally, when the question on acceptability of the English element was correlated with the question on how the students rate their knowledge of English according to the CEFR classification, we obtained the following results (see Table 9):

CEFR	LEVEL OF ACCEPTABILITY				TOTAL (LINES)
	[1,2]	[2,3]	[3,4]	[4,5]	
A2	0	1 (1.3 %)	0	0	1
B1	0	0	6 (7.8 %)	1 (1.3 %)	7
B2	0	4 (5.2 %)	12 (15.6 %)	7 (9.1 %)	23
C1	1 (1.3 %)	10 (13 %)	17 (22.1 %)	5 (6.5 %)	33
C2	0	0	9 (11.7 %)	4 (5.2 %)	13
TOTAL (COLUMNS)	1	15	44	17	77

Table 9. Correlation of the level of acceptability of the English element and self-perceived CEFR grades for General English

The results show that those students who rated themselves as A2 CEFR level had a statistically lower average of acceptability (P-value was 0.03, lower than 0.05). However, it also shows that the higher grade the students rated themselves, the higher was their acceptability of the English element or slightly adapted or unadapted forms.

The question of acceptability of the English element was also correlated with the question on the preferred language in their Internet navigation (Fig. 2).

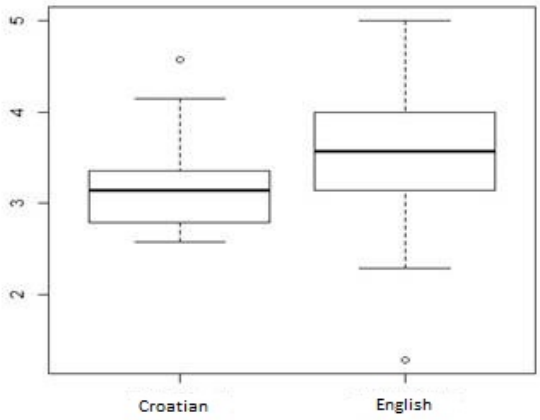

Figure 2. Correlation of the level of acceptability of the English element and students' preferred language of Internet search

Figure 2 shows that those students who prefer English to Croatian when reading texts on computing on the Internet exhibit a higher level of acceptability toward the English element (P-value is 0.033, which is lower than 0.05). The students who prefer English are usually those who have a good command of the language and

are able to understand the English of ICT texts. Therefore, adapted or partially adapted Anglicisms as well as unadapted forms do not seem unacceptable to them, which can be explained by their prolonged exposure to English ICT texts.

The participants in our survey were students who have very general linguistic education and their "attitudes cannot be easily observed in an objective way. Speakers are not likely to be aware of their attitudes to borrowing, because they rarely have extensive knowledge about other sociolinguistic situations and other possible attitudes" (Haspelmath, 2009: 47). However, what can be certainly concluded is that students do not show purist attitudes, although purism is valued in Croatian language policy. The more numerous speakers of the giving language are, in this case the English language, the more borrowed words will enter the receiving language, in this case the Croatian language, which proves to be rather receptive to ICT borrowings remaining unadapted. Furthermore, the more prestigious the language, the weaker is the tendency to adaptation in the receiving language (Nikolić-Hoyt, 2005: 181). Our survey and the obtained results correspond to these observations.

4.3. Students' attitude toward English and Croatian in the ICT context

In the final part of the questionnaire, the students were asked to express their agreement or disagreement with a number of statements that were partially taken from Mihaljević (2006), where they were presented as common misconceptions, and partially from the opinions voiced by some of the students during the author's years-long ESP teaching experience at the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split.

Their agreement (or lack thereof) with the statements was rated by using a 5-point Likert scale (strongly disagree-1; disagree-2; neither agree nor disagree-3; agree-4; and strongly agree-5). Table 10 contains those ten statements (translated from Croatian into English by the author), the number of students who expressed their agreement in each of the given categories on a scale 1-5, and the average of agreement for each statement.

STATEMENT	LEVEL OF AGREEMENT					
	1	2	3	4	5	AVERAGE
1. English computer terms are much more precise than Croatian terms – English term precisely describes the concept.	13	15	27	14	8	**4.3**
2. Everyone knows what an English computer term means – everyone speaks like that.	0	1	8	45	23	**4.1**
3. Croatian terms do not describe the concept precisely.	2	7	20	37	11	**3.6**
4. Accepting English terms will increase and improve the knowledge of English in users.	2	3	13	33	26	**4.0**
5. Croatian terms are often too long.	1	8	14	39	15	**3.7**
6. I use English terms more often when speaking.	0	2	6	25	43	**4.3**
7. Croatian computer terms are sometimes funny.	0	1	6	23	47	**4.4**
8. English terms are more attractive, more prestigious and they sound better.	1	3	11	33	28	**4.0**
9. It is not necessary to create Croatian computer terms when we have English ones.	9	16	23	12	17	**3.1**
10. It is difficult to translate English terms into Croatian because the Croatian language vocabulary is less developed than English.	13	15	27	14	8	**2.8**

Table 10. Statements, number of students and the average of agreement

There were six statements which had a high degree of agreement average 4.0 or above among the students (statements 1, 2, 4, 6, 7, and 8). However, the highest agreement was reached in statement 7 (average 4.4) – "Croatian computer terms are sometimes funny". It can only be speculated why Croatian terms sound inappropriate, or funny, to the students: maybe because they have been used to English terms and formed a habit of using English, or because Croatian ICT terms have not been formed, derived or translated from English successfully in their opinion, so that they disregard them in their verbal exchanges. One of the reasons may also be the fact that at least some of the students had first learned the English term for an ICT referent before they came across a Croatian equivalent. Since Croatian ICT magazines import English terms and use them indiscriminately, students can find far more Croatian terms in scientific ICT books, which employ a different style and a more formal register compared to that of journalism, and such literature is recommended in their curriculum by their university professors.

The students' agreement with statement 3 (average 3.6) shows that Croatian terms are not perceived as hopelessly imprecise, so obviously there is some room for the improvement of Croatian ICT terminology. In their answers the students tried not to completely dismiss the idea of creating Croatian computer terminology and they showed a rather high level of disagreement with statements 9 (average 3.1) and 10 (average 2.8), which approached the issue of translation and the difficulties which may arise in the translation process. This set of statements (statements 3, 9, 10) and the corresponding average rates of agreement reveal that

the students do not perceive their native language as deficient, inadequate or superfluous in the ICT field, or lacking in word formation potential.

Statement 6 could be indicative of the students' overall attitude: the average of agreement of 4.3 shows that English terms are preferred when speaking, when communication should be quick, efficient and facilitated by "easy-to-use" and "ready-made" English terms to achieve the maximum effect for the minimum effort. This is especially the case when "English term precisely describes the concept" (statement 1, average 4.3), probably because the term which named the concept they first heard of was an English one. This is also the case with statement 2, "everyone speaks like that", (average 4.1), where the use of English terms may prove to be a means of identification for ICT professionals in general and part of their jargon (cf. Škifić & Mustapić, 2012: 813). Haspelmath (2009: 47) explains this phenomenon as follows: "When many people know a concept by a certain word but not by another word, even if the better-known word belongs to another language, it becomes more efficient to use the better-known word". However, the students' answers to the above questions on formality levels (Tables 3, 4 and 5) show that they are aware not only of formality, but also of requirements in written communication for which they prefer Croatian terms, even though they are sometimes longer than the English ones. Agreement or disagreement with statement 5 (average 3.7) supports that point. Apart from efficiency that English provides in oral communication, a high degree of agreement in statement 8 (average 4.0) testifies to the students' susceptibility to fashionable trends and maybe even snobbishness. This complements their answers to statement 7 (average 4.4) and statement 2 (average 4.1), although it is too soon to tell how many of these English terms are nonce borrowings, on the one hand, and how many will remain and become part of Croatian lexicon, on the other. On the whole, students exhibit a rather permissive attitude toward unadapted borrowed forms, which disaccords with the purist tradition prevailing in Croatian linguistics.

5. DISCUSSION

English is a globally influential language, especially in the ICT domain – new concepts come to life almost on a daily basis, they are termed and then spread to other languages, including Croatian, sooner than linguists in collaboration with ICT experts manage to come up with an equivalent in the receiving language. This may be true of a great number of expressions for novel concepts, but a simple dictionary search showed that some of the English expressions which we used in this research have had their Croatian equivalent for a number of years. The question why they have not been used in the magazines we selected for the analysis remains unanswered, but it points to a certain degree of negligence toward Croatian. Not only do the magazines and their contributors fail to use Croatian expressions and thus help their circulation and integration into the

standard Croatian, but they also, by using English expressions indiscriminately, be this consciously or not, support some of the abovementioned statements or misconceptions contained in Table 10 (e.g. 1, 3 or 9). The use of borrowed terms instead of equivalents sometimes testifies to intellectual slackness (Sočanac, 2010: 72-73). The examples of the journalistic substyle, one of the standard language styles, which adopted some features of the ICT jargon, suggest that language awareness in magazines should be raised and that additional effort should be invested into the native language education, as well as into proofreading and editing service.

The research results, which reflect the computer science students' attitude toward the English element in the ICT context, show that the students perceive the adaptation of English words as a process which is not particularly desirable, whereas unadapted English expressions are perceived as fitting the standard Croatian. On the other hand, the students would not always readily use these expressions in a formal text in Croatian, which points to their native language awareness and intuition. These revealed facts, which may seem contradictory, but only up to a point, suggest that in ESP teaching more attention should be paid to translation exercises (English to Croatian and vice versa), word formation exercises in both languages, work with ICT dictionaries (mono- and bilingual), experimenting with and inventing equivalents from the native language resources. The findings may also suggest that university courses such as English for Academic Purposes and Croatian for Academic Purposes (proposed by some professors, but not yet introduced at Croatian universities, to the best of the author's knowledge), tailored to the computer science students' needs, would help them better differentiate between various registers and various styles of speaking and writing. The knowledge and language skills which they would acquire or expand in such university courses will be an asset not only to their possible academic career, but also to a writing career in professional journals or magazines.

6. CONCLUSION

The research and the survey conducted for the purposes of this paper were conceived in order to establish the current attitude of the computer science student population toward the English element in Croatian ICT magazines.

As to the students' attitude on the acceptability of the English element in this type of magazines, our findings show that the English element and unadapted forms in computer magazines are on average not only accepted but preferred in the computer science student population, especially in students whose English language grades, as well as their subjective opinion on their English language knowledge, are higher. Croatian adaptations in Anglicisms, however, are dispreferred and sometimes felt as a foreign element. According to our findings, it

seems that the higher the integration into Croatian, the lower acceptability among the computer science students.

Finally, English ICT terminology is seen more as a practical tool in oral communication for those who strive for fast exchange of turns and language efficiency. It is also frequent in conversational style among peers where English ICT terms, often opaque to the non-ICT world, serve as a means of in-group identification. Croatian terminology is perceived as appropriate for written communication, where formality levels are higher, and consequently, effort has to be invested into finding an adequate term that will function in a formal context. This fact testifies to the students' language awareness of different functional styles and the requirements of written communication which are not always met in ICT journalism.

[Paper submitted 25 Sep 2014]
[Revised version accepted for publication 20 Nov 2014]

References

Barić, E. et al. (1999). *Hrvatski jezični savjetnik* [A handbook of advice on the Croatian language usage]. Zagreb: Institut za hrvatski jezik i jezikoslovlje, Pergamena, Školske novine.

Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. Harlow: Pearson Education Limited.

Filipović, R. (1986). *Teorija jezika u kontaktu: Uvod u lingvistiku jezičnih dodira* [A theory of languages in contact: Introduction to contact linguistics]. Zagreb: Djela Jugoslavenske akademije znanosti i umjetnosti, Školska knjiga.

Filipović, R. (1990). *Anglicizmi u hrvatskom ili srpskom jeziku: Porijeklo – razvoj – značenje* [Anglicisms in the Croatian or Serbian language: Origin – development – meaning]. Zagreb: Djela Jugoslavenske akademije znanosti i umjetnosti, Školska knjiga.

Halliday, M. A. K., & Matthiessen, C. (2004). *An introduction to functional grammar* (3rd ed.). London: Hodder Arnold.

Halonja, A., & Mihaljević, M. (2012). *Od računalnog žargona do računalnog nazivlja* [From computer jargon to computer terminology]. Zagreb: Hrvatska sveučilišna naklada.

Haspelmath, M. (2009). Lexical borrowing: Concepts and issues. In M. Haspelmath, & U. Tadmor (Eds.), *Loanwords in the world's languages: A comparative handbook* (pp. 35-54). Berlin: De Gruyter Mouton.

Hudeček, L., & Mihaljević, M. (2009). *Jezik medija. Publicistički funkcionalni stil* [Media language. Journalistic functional style]. Zagreb: Hrvatska sveučilišna naknada.

Kiš, M. (2000). *Englesko-hrvatski i hrvatsko-engleski informatički rječnik* [English-Croatian and Croatian-English information science dictionary]. Zagreb: Naklada Ljevak.

Mihaljević, M. (1993). *Hrvatsko računalno nazivlje. Jezična analiza* [Croatian computer terminology. A language analysis]. Zagreb: Hrvatska sveučilišna naklada.

Mihaljević, M. (2003). *Kako se na hrvatskome kaže WWW?: Kroatistički pogled na svijet računala* [What is WWW called in Croatian?: A Croatian studies view on the computer world]. Zagreb: Hrvatska sveučilišna naklada.

Mihaljević, M. (2006). Hrvatsko i englesko računalno nazivlje [Croatian and English computer terminology]. *Jezik*, *53*(2), 41-80.

Mihaljević, M. (2007). Problemi hrvatskoga računalnog nazivlja (s jezikoslovnog motrišta) [Issues in Croatian computer terminology (from a linguistic viewpoint)]. *Studia lexicographica*, *1*(1), 61-79.

Nikolić-Hoyt, A. (2005). Hrvatski u dodiru s engleskim jezikom [Croatian in contact with English]. In L. Sočanac (Ed.), *Hrvatski jezik u dodiru s europskim jezicima. Prilagodba posuđenica* [Croatian in contact with European languages. Adaptation of loanwords] (pp. 179-205). Zagreb: Nakladni zavod Globus.

Silić, J. (2006). *Funkcionalni stilovi hrvatskoga jezika* [Functional styles of the Croatian language]. Zagreb: Disput.

Škifić, S., & Mustapić, E. (2012). Anglizmi i hrvatsko računalno nazivlje kroz prizmu jezičnoga kontakta i jezične ideologije [Anglicisms and Croatian computer terminology through a prism of language contact and language ideology]. *Jezikoslovlje, 13*(3), 809-839.

Sočanac, L. (2005). Uvod: Teorija i metodologija [Introduction: Theory and methodology]. In L. Sočanac (Ed.), *Hrvatski jezik u dodiru s europskim jezicima. Prilagodba posuđenica* [Croatian in contact with European languages. Adaptation of loanwords] (pp. 9-17). Zagreb: Nakladni zavod Globus.

Sočanac, L. (2010). *Studije o višejezičnosti* [Studies in multilingualism]. Zagreb: Nakladni zavod Globus.

Stojaković, B. (2004). Hrvatsko računalno nazivlje u društvenoj interakciji [Croatian computer terminology in social interaction]. *Strani jezici*, *33*(1-2), 83-92.

Stojaković, B., & Malčić, G. (2006). Standardizacija hrvatskog računalnog nazivlja [Standardization of Croatian computer terminology]. In M. Čičin-Šain (Ed.), *Computers in Education (CE): Conference proceedings* (pp. 262-265). Rijeka: MIPRO hrvatska udruga Rijeka.

Thomason, S. (2010). Contact explanations in linguistics. In R. Hickey (Ed.), *The handbook of language contact* (pp. 31-47). Malden, MA: Wiley-Blackwell.

DANIELA MATIĆ is Assistant Professor at the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split (Croatia), where she teaches English for Specific Purposes to students of computer science, electrical engineering and naval architecture. She earned her PhD in linguistics from the Faculty of Humanities and Social Sciences, University of Zagreb. She has authored, co-authored and published a number of journal articles on ESP, language teaching methodology, pragmatics and critical discourse analysis.

Appendix

The questionnaire

Dear students,

You have been handed in a questionnaire by means of which we want to find out more about your attitude toward your knowledge of English, your attitude toward Anglicisms (words borrowed from English) in ICT terminology, toward the Croatian ICT terminology and possible suggestions with a view of improving current practice. Your participation is voluntary and you do not have to fill out the questionnaire if you do not want to. Since this poll is anonymous and the results will be used for the purposes of research, we kindly ask you to read all the questions carefully and answer them honestly and to fill out all parts of the questionnaire in an appropriate fashion by circling the answer or by writing it. We thank you for your time and effort and wish you success at the end of this academic year.

P A R T 1

GENERAL INFORMATION ON EDUCATION AND KNOWLEDGE OF ENGLISH:

1. Gender: M F
2. Age: _____
3. Grade obtained in the *English in computing 1* course: _____
4. Which school did you attend:
   a) grammar school b) vocational school
5. I studied general English:
   a) only in regular school classes
   b) in regular school classes and in a foreign languages school or in private lessons
   c) only in a foreign languages school or in private lessons

STUDENTS' ATTITUDE TOWARD THEIR KNOWLEDGE AND USE OF ENGLISH:

6. According to the CEFR classification I would rate my knowledge of English as:
   a) A1 b) A2 c) B1 d) B2 e) C1 f) C2

SPECIFIC INFORMATION ON THE WAYS OF ACQUIRING KNOWLEDGE OF ICT:

7. When you read texts on ICT from books, magazines or Internet websites, they are **most often** written in:
   a) Croatian b) English

P A R T 2: LANGUAGE QUESTIONS

8. If you were writing a **formal** text in Croatian (e.g. research or topic paper, essay, review), which expressions would you use? (circle the expression you find the most acceptable)

1.	a) smartphone	b) smartfon	c) smartphone uređaj	d) pametni telefon
2.	a) hardware	b)hardver	-----	d) sklopovlje
3.	a) touchscreen	-----	-----	d) dodirni ekran/ zaslon osjetljiv na dodir
4.	a) smartwatch	-----	c) smart sat	d) pametni sat
5.	a) web browser	-----	c) web preglednik	-----
6.	a) laptop	-----	-----	d) prijenosno računalo/prijenosnik

9. Do you find the following forms of Anglicisms **acceptable** in the standard Croatian? Rate the acceptability by circling a digit on a 5-point scale (1=totally unacceptable, 2=mostly unacceptable, 3=neither acceptable nor unacceptable, 4=mostly acceptable, 5=totally acceptable). You can propose your own term or write a translation, description or explanation.

ANGLICISM	LEVEL OF ACCEPTABILITY	PROPOSED TERM OR TRANSLATION
1. kontroler	1 2 3 4 5	
2. kompajler	1 2 3 4 5	
3. tutorijal	1 2 3 4 5	
4. ekstruder	1 2 3 4 5	
5. rauter	1 2 3 4 5	
6. hosting	1 2 3 4 5	
7. gejmer	1 2 3 4 5	

1. overclockeri	1 2 3 4 5	
2. shaderi	1 2 3 4 5	
3. gameri	1 2 3 4 5	
4. fajlovi	1 2 3 4 5	
5. add-onovi	1 2 3 4 5	
6. driveri	1 2 3 4 5	
7. game developeri	1 2 3 4 5	
8. gadgeti	1 2 3 4 5	
9. tooltipovi	1 2 3 4 5	
10. frameworci	1 2 3 4 5	
11. benchmarci	1 2 3 4 5	
12. featuri	1 2 3 4 5	
13. webbrowseri	1 2 3 4 5	
14. widgeti	1 2 3 4 5	
15. stickovi	1 2 3 4 5	
16. launcheri	1 2 3 4 5	
17. teraflopsi	1 2 3 4 5	
18. flagshipovi	1 2 3 4 5	
19. shooteri	1 2 3 4 5	
20. pluginovi	1 2 3 4 5	
21. streamovi	1 2 3 4 5	
22. geekovi	1 2 3 4 5	

1. gađetirajuća	1 2 3 4 5	
2. bugovita	1 2 3 4 5	
3. cross-platformski	1 2 3 4 5	
4. najgamerskiji	1 2 3 4 5	
5. smartfonoliki	1 2 3 4 5	

10. The table below contains a number of statements concerning the use of English ICT terms and Anglicisms as well as Croatian ICT terms. Read each statement and by circling a digit on a 5-point scale (1=strongly disagree; 2= disagree; 3=neither agree nor disagree; 4=agree; 5= strongly agree) express your agreement or disagreement with the statements.

STATEMENTS	AGREEMENT
11. English computer terms are much more precise than Croatian terms – English term precisely describes the concept.	1 2 3 4 5
12. Everyone knows what an English computer term means – everyone speaks like that.	1 2 3 4 5
13. Croatian terms do not describe the concept precisely.	1 2 3 4 5
14. Accepting English terms will increase and improve the knowledge of English in users.	1 2 3 4 5
15. Croatian terms are often too long.	1 2 3 4 5
16. I use English terms more often when speaking.	1 2 3 4 5
17. Croatian computer terms are sometimes funny.	1 2 3 4 5
18. English terms are more attractive, more prestigious and they sound better.	1 2 3 4 5
19. It is not necessary to create Croatian computer terms when we have English ones.	1 2 3 4 5
20. It is difficult to translate English terms into Croatian because the Croatian language vocabulary is less developed than English.	1 2 3 4 5