

*The relationship between the use of language learning strategies, learners' beliefs about CALL and speaking in a foreign language*

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Abstract

As MacIntyre (1994, p. 185) states, "one of the most fertile areas of research in language learning in recent years is the topic of language learning strategies" (LLSs). However, similarly to other individual differences (IDs), such as learning styles, research into this cognitive variable suffers from theoretical weaknesses such as the lack of one commonly accepted definition or the existence of rival taxonomies. The definitions and conceptualizations offered in the second language learning literature have been referred to as 'inconsistent', 'elusive', or 'fuzzy' (Dörnyei & Skehan, 2003; Drożdźiał-Szelest, 1997). It is interesting to note that there is a plethora of research into the relationship between use of LLSs and foreign language (FL) achievement, with FL speaking skills being no exception (e.g., Pietrzykowska, 2014). However, the link between these variables has rarely been addressed with respect to Computer Assisted Language Learning (CALL), which is a vast area that has evolved dramatically in the last 50+ years and is now a crucial component of second and foreign language pedagogy. The current study was conducted among English for Specific Purposes (ESP) students as part of research into individual differences in FL learning. The present paper aims to investigate the relationship between learning strategies, learners' beliefs about CALL, and FL speaking. Taking into consideration the fact that there have been very few empirical studies investigating the relationship between the variables, the topic appears to be both interesting and challenging.

*Keywords:* language learning strategies; computer-assisted language learning; speaking attainment; blended learning

## 1. Introduction

What is beyond doubt is that learning a foreign language (FL) is a complex phenomenon and that some people learn faster achieving more spectacular results than others, which is aptly discussed by Segalowitz (1997, p. 85), who asks: "Why do individuals differ so much in second language (L2) attainment? After all, every healthy human being in an intact social environment masters a first language to a degree of fluency that, in other skill domains, would be recognized as elite or near elite levels (...)". Therefore, in the past decades a number of applied linguists have invested a large amount of effort into trying to identify, name, classify, and describe the individual learner variables in respect of which people differ in order to examine what accounts for learners' differential success in FL learning. This was summarized by Larsen-Freeman and Long (1994, p. 153) in the following way: "one of the major conundrums in the SLA field is the question of differential success". Although numerous scholars give priority to learners' motivation (Dörnyei, 2005) or foreign language aptitude (Rysiewicz, 2004) in determining the ultimate achievement, quite a number of specialists (e.g., Drożdżał-Szelest, 1997; Oxford, 1990) also share the present researcher's opinion that such factors as language learning strategies (LLS) may shape the trajectories of FL learning and, therefore, should not be ignored. On the other hand, it is true that ubiquitous computing and round-the-clock access to the Internet, which provides a great number of web 2.0 tools, defined as an umbrella term frequently applied to "a heterogeneous mix of relatively familiar and also very emergent technologies" (Alexander, 2006, p. 33), have opened new horizons for FL learning and teaching and increased the need for teacher training and professional development. With the advent of modern technologies and new ways of learning that were unknown several years ago, it would be interesting to investigate learner individual differences (IDs) in different computer-assisted language learning (CALL) environments. According to Stockwell and Tanaka-Ellis (2012), CALL environments can be divided into the following four categories: *face-to-face (FtF) environments*, *blended environments*, *distance environments*, and *virtual environments*. Additionally, because of the fact that students learn in a variety of different ways and no single methodology is effective for all of them, it would be useful to look at learners' beliefs about CALL and types of instruction that they are likely to benefit from with special attention being given to oral proficiency.

## 2. Previous research on the use of LLSs, learners' beliefs about CALL, and FL speaking

Without doubt, the most widely researched area of Computer Assisted Language Learning are students' beliefs about CALL, which have been investigated in studies conducted by such scholars as Warschauer (1996), Akbulut (2008), Liu (2013), Sagarra and Zapata (2008), or Stracke (2007). As Chapelle and Heift

(2009, p. 246) aptly suggest, "(...) an important area for computer-assisted language learning (CALL) research is to attempt to better understand the ways in which individual differences affect learners' use of CALL and the benefits different types of learners may obtain from the use of such materials". On the other hand, carrying out research in Computer Assisted Language Learning environments is extremely complex for many reasons, one of which are IDs, a problem which has been described by Blake (2009, p. 829) in the following way:

(...) the myriad of DL formats and environment circumstances differ from course to course and institution to institution, along with other confounding factors such as different DL teacher styles, attitudes, and individual learner variables (i.e., learner attitudes and aptitudes). Trying to isolate and discretely control for these independent variables, to be able to compare student outcomes for different modalities-such as F2F classrooms versus DL courses-seems doubtful, if not doomed from the start.

Although research on individual learner differences has proliferated in the last decades and the area of CALL has received increased attention in the past few years, there are only few extensive, state-of-the-art studies in which FL learning was supported by CALL.

When it comes to the main foci of research into language learning strategies and CALL, the most important of them include the use of LLSs in different CALL environments (e.g., Ganjooei & Rahimi, 2008; Saito, 2005) as well as the relationship between LLSs and other IDs, such as learning styles (e.g., Liu & Reed, 1994), motivation (e.g., Chang, 2005) or age (e.g., Felix, 2001). As regards studies of students' FL performance in the CALL environment, they have mostly focused on learners' attainment with reference to writing (e.g., Jafarian, Soori, & Kafipour, 2012; Sullivan & Pratt, 1996) or grammar (e.g., Naba'h, Hussain, Al-Omari, & Shdeifat, 2009). However, to the best knowledge of the present researcher, there have surprisingly been no empirical investigations that would have attempted to tap the relationship between students' LLS use, learners' beliefs about CALL and FL speaking outcomes, which must come as a surprise, taking into account the importance of this area spelled out in the introductory part of the current paper. Thus, the study reported below is an attempt to fill the existing gap and dispel some of the myths surrounding the place of the computer medium in the FL classroom.

### 3. The study

#### 3.1. Aims and research questions

As mentioned earlier, in light of the fact that available research on the relationship between the use of learning strategies, learners' beliefs about CALL and FL

speaking attainment is rather scarce and limited in scope, the study aimed to contribute to this line of enquiry by investigating ESP students' LLSs use and their beliefs about CALL, as well as tapping the link between these two variables and FL speaking performance. More specifically, it sought to address the following research question:

- What is the relationship between learning strategies, learners' beliefs about CALL, and attainment in FL speaking?

### 3.2. Participants

Seven groups of students participating in a course of English as a foreign language in a major university of technology in Poland were involved in the study. The subjects were 120 Polish learners, 90 males and 30 females ( $N = 120$ ; average age = 19.6). The learners were attending an ESP blended learning course in the academic year 2012/2013 as part of a full-time program in which 70% of the classes were conducted in the FL classroom (specialized language referring to a given field of study), whereas 30% of them were online lessons (Business English). Over one third of the participants (56%) declared that they had also been learning German or other foreign languages such as Russian (10%), French (8%), or Spanish (5%).

Table 1 A description of the participants

Group	Group symbol	Number of participants	Group level
Electronics and Telecommunications	01ET	18	B2
Electronics and Telecommunications	02ET	18	B1
Electronics and Telecommunications	03ET	20	B1
Materials Engineering	05ME	17	B2
Mechanical Engineering	07MC	19	A2
Management and Production Engineering	08MP	13	A2
Management and Production Engineering	09MP	15	A2

The fields of study that were selected for the purpose of the research were: Electronics and Telecommunications (ET), Materials Engineering (ME), Mechanical Engineering (MC) as well as Management and Production Engineering (MP). As far as the participants' command of English is concerned, it varied considerably and the seven groups could be viewed as mixed-proficiency, with the caveat that the levels of proficiency of the respondents could roughly be characterized according to the *Common European framework of reference for languages* (CEFR), as shown in Table 1. This was confirmed by the results of a placement test and teachers conducting classes with these groups of learners. As declared by the participants in the *Learner Profile* questionnaire, a detailed description of which will be provided in Section 3.3. of this paper, the most frequent

reasons for their learning English were as follows: "I would like to get a well-paid job" (77%), "This subject is compulsory at the university" (54%), "I like learning English" (44%), "I would like to go abroad" (41%), and "I would like to have a certificate of English" (30%). Most of the students also admitted that they had contact with the English language during classes at the university (88%) and while talking to friends from different countries (44%). Over 40% of the learners stated that they used English every day. The participants also stated that they found the following activities useful in learning English: using the Internet (95%), watching films (86%), using computer programs (66%), playing computer games (64%), watching TV programs (41%), and reading newspapers and magazines (38%). The subjects (36%) also declared that they had visited English speaking countries and the average time spent abroad per person was 24.7 days. Only several students (3%) stated that they held certificates in English, among them: the *First Certificate in English* – FCE (2%), the *European Language Certificate* – TELC, and the *Test of English for International Communication* – TOEIC (1%). When it comes to using computer technology, the learners reported having a computer at home and having used it for 11.7 years, 26.9 hours a week (both averages). They used computers with high speed data transfer at home (96%), at the university (42%) and used mobile phones or LTE technology (3%). The respondents reported spending 24 hours a week using the Internet in general and stated that they used this medium in the following ways: gathering information (75%), reading (58%), playing computer games (45%), making conversations (38%), reading and writing emails (35%), and learning grammar and vocabulary (27%). Only seven learners (4%) stated that they had participated in an e-learning course of English, which took place in a language school (3%), at the university (1%), or in secondary school (1%).

### 3.3. Data collection and analysis

The students were asked to complete three self-report questionnaires, that is the *Learner Profile* (LP), the *Beliefs about CALL Questionnaire* (BCQ) and the *Strategy Inventory for Language Learning* (SILL) as well as to perform two *Speaking Tasks* (ST). As regards the *Learner Profile* and the *Beliefs about CALL Questionnaire*, these instruments were specifically developed by the present researcher for the purpose of the current research project (Olejarczuk, 2013, 2014, 2015) and they were intended to gather information about the ESP learners participating in the study. The questionnaires were written in Polish, a decision dictated by the fact that there was a danger that some of the students could have misunderstood the questions in a FL, which could have jeopardized the reliability of the study. It should be noted that the SILL questionnaire (Oxford,

1989) was translated into Polish by the present researcher. When it comes to the *Learner Profile*, it was composed of the following two parts:

1. General information, the main aim of which was to gather basic information about the participants, and which was further subdivided into:
  - a. General information about the students – this part consisted of 7 items concerning such questions as the respondents' age or field of study;
  - b. General information about learning English – this part was designed to collect information concerned with FL learning and it consisted of 14 items, such as "Which foreign language do you learn at the university?"
2. Computer Assisted language Learning (CALL) – the main aim of this part was to collect general information concerning the use of Information and Communications Technology (ICT) and consisted of 9 items, such as, for example: "Have you ever participated in a blended learning course?"

As regards the *Beliefs about CALL Questionnaire*, this data collection tool was directly connected with the students' beliefs about the application of CALL and consisted of 27 five-point Likert-scale items, where 1 indicated *complete disagreement* and 5 *complete agreement*. The items included in the questionnaire provided insights into such areas as:

- the effectiveness of working with the computer while learning English, e.g., "Learning English is more effective using the computer than using traditional methods";
- the feedback the computer provides, e.g., "Feedback that is provided by the computer after a task has been completed is clear";
- the importance of using the computer to learn English, e.g., "Using the computer to learn English is as important as traditional learning methods";
- students' preferences, e.g., "I prefer using the computer to learn English than using a traditional coursebook";
- students' attitudes towards CALL, e.g., "When I use CALL, I am less stressed";
- computer use, e.g., "I use online or electronic dictionaries (e.g., on DVD-ROM) to learn English".

The survey also contained the following open-ended question: "Do you use the computer to learn English in any other way? If yes, please specify", which was aimed to collect additional information from the students about using the computer to learn English.

The *Strategy Inventory for Language Learning* is a self-report questionnaire developed by Rebecca Oxford (1989) as a data collection tool that assesses LLS use. The SILL, version 7.0 (ESL/EFL), consists of 50, five-point Likert-scale

items, where 1 indicates *never or almost never true of me* and 5 indicates *always or almost always true of me*. While completing the questionnaire, the participants are asked to provide answers in terms of how well the statements describe them. The SILL is based on Oxford's (1990) taxonomy of language learning strategies and composed of the following six parts: A: *memory strategies*: remembering more effectively, B: *cognitive strategies*: using mental processes, C: *compensation strategies*: making up for missing knowledge, D: *metacognitive strategies*: managing the learning process, E: *affective strategies*: managing one's emotions, and F: *social strategies*: learning via interaction with others. The main purpose of the SILL is to provide a general picture of students' strategy use rather than a description of the strategies used by the learners during the performance of a particular language task.

As regards the *Speaking Tasks*, they were developed by the present researcher and administered to the respondents in two periods of time, at the beginning and at the end of the semester. The main objective of using these tasks was to assess the students' speaking skills with regard to *Business English*. Each ST was supposed to last no longer than 5 minutes and was recorded by the learners in a language laboratory under the supervision of a teacher of English. In *Speaking Task 1*, the students were supposed to prepare a short speech and explain why they had chosen to study at their university, what they would like to do after graduating from their field of study, what they would take into consideration while looking for a job and why, and name different places where they could be employed in the future. In *Speaking Task 2*, the subjects were asked to explain what the definition of an invention is, say if they agreed with what Thomas Edison said, namely: "Invention is 99 % perspiration and 1% inspiration", explain what other qualities inventors need, and state which, according to them, was the most important invention in history and why? The *Speaking Tasks* were assessed using five criteria, according to the examination standards at the university of technology, which were as follows: grammar/lexical structures (1-6 points), language (1-6 points), grammatical correctness (1-6 points), message conveyance (1-6 points), and pronunciation/intonation (1-6 points). The students could receive a maximum of 30 points for each of these two tasks.

It should be noted that all the self-report questionnaires were piloted with a comparable group of respondents, which allowed introducing changes to some of the items, and internal consistency reliability was determined by computing Cronbach's alpha, which stood at 0.78 and 0.89 in the case of the BCQ and the SILL, respectively, values that were satisfactory. Additionally, such calculations were also performed for *Speaking Tasks 1* and *2*, with the values equaling 0.86 and 0.85, respectively. The data collected through the BCQ, the SILL as well as *Speaking Tasks 1* and *2* were subjected to quantitative analysis, which

involved calculating descriptive statistics applied to highlight general tendencies in the data. Another statistical procedure that was employed involved paired samples *t*-tests conducted in order to inspect whether statistically significant differences within groups could be found. Finally, correlation analysis was used in the present study in order to verify the presence of a positive or negative relationship among the variables. In the current research project Pearson product-moment correlation coefficient (*Pearson r*) was calculated.

### 3.4. Research findings

Table 2 shows the participants' responses to the 50 SILL items with reference to six categories of LLSs, i.e., *memory strategies*, *cognitive strategies*, *compensation strategies*, *metacognitive strategies*, *affective strategies*, and *social strategies*. Oxford (1990) provides a key to understanding the average scores of the questionnaire and the subsequent analysis is based on this interpretation.

Table 2 Descriptive statistics for the SILL

( <i>N</i> = 120)	Mean	<i>SD</i>
Memory strategies	2.94	1.00
Cognitive strategies	3.47	1.03
Compensation strategies	3.39	0.97
Metacognitive strategies	3.33	0.91
Affective strategies	2.65	0.99
Social strategies	3.35	1.02
Total	3.23	0.99

In the first place, it should be noted that the average of the participants' learning strategies use, as measured by the SILL, was *medium* (sometimes used) ( $M = 3.23$ ,  $SD = 0.99$ ), with the caveat that the highest mean score was observed in the case of cognitive strategies ( $M = 3.47$ ,  $SD = 1.03$ ) and compensation strategies ( $M = 3.39$ ,  $SD = 0.97$ ). The standard deviation values ranged between 0.91 (metacognitive strategies) and 1.03 (cognitive strategies), with the standard deviation value for the whole tool being equal to 0.99, which shows that the participants' responses to the SILL questionnaire were similar, clustering around the mean. It can also be stated that the participants did not appear to be frequent LLSs users, as indicated by the mean scores of the students' responses. After particular questionnaire items had been examined, several conclusions were drawn. Firstly, there were no items with an average value of 4.5-5.00 (always or almost always used). Secondly, there was only one item with the value of 1.0-1.4 (never or almost never used), which was SILL43: "I write down my feelings in a language learning diary" ( $M = 1.36$ ,  $SD = 0.59$ ).



As for the reported frequency of use of specific items among the subjects, high averages (usually used – 3.5-4.4) were determined for the following statements: SILLD32: "I pay attention when someone is speaking English" ( $M = 3.98$ ,  $SD = 0.73$ ); SILLA1: "I think of relationships between what I already know and new things I learn in English" ( $M = 3.92$ ,  $SD = 0.82$ ); SILLB11: "I try to talk like native English speakers" ( $M = 3.75$ ,  $SD = 0.97$ ); SILLD31: "I notice my English mistakes and use that information to help me do better" ( $M = 3.71$ ,  $SD = 0.85$ ); SILLB22: "I try not to translate word-for-word" ( $M = 3.68$ ,  $SD = 1.06$ ); SILLB10: "I say or write new English words several times" ( $M = 3.63$ ,  $SD = 1.07$ ); SILLB23: "I make summaries of information that I hear or read in English" ( $M = 3.58$ ,  $SD = 0.84$ ); and SILLD33: "I try to find out how to be a better learner of English" ( $M = 3.58$ ,  $SD = 0.84$ ) with the last two having equal mean values; SILLF49: "I ask questions in English" ( $M = 3.55$ ,  $SD = 0.93$ ); SILLB13: "I use the English words I know in different ways" ( $M = 3.54$ ,  $SD = 0.80$ ); SILLA2: "I use new English words in a sentence so I can remember them" ( $M = 3.53$ ,  $SD = 0.84$ ); SILLB21: "I find the meaning of an English word by dividing it into parts that I understand" ( $M = 3.52$ ,  $SD = 1.11$ ); SILLC24: "To understand unfamiliar English words, I make guesses" ( $M = 3.51$ ,  $SD = 0.99$ ); as well as SILLB20: "I try to find patterns in English" ( $M = 3.50$ ,  $SD = 1.08$ ) and SILLC25: "When I can't think of a word during a conversation in English, I use gestures" ( $M = 3.50$ ,  $SD = 1.12$ ) that had the same mean scores.

The lowest averages (generally not used – 1.5-2.4) were determined for the following items: SILLA5: "I use rhymes to remember new English words" ( $M = 2.02$ ,  $SD = 1.01$ ); SILLA6: "I use flashcards to remember new English words" ( $M = 1.88$ ,  $SD = 0.99$ ); SILLA7: "I physically act out new English words" ( $M = 2.25$ ,  $SD = 1.02$ ); SILLC26: "I make up new words if I do not know the right ones in English" ( $M = 2.31$ ,  $SD = 1.11$ ); and SILLE44: "I talk to someone else about how I feel when I am learning English" ( $M = 1.97$ ,  $SD = 1.11$ ). It is worth mentioning that the lowest standard deviation value equaled 0.59 in the case of SILLE43: "I write down my feelings in a language learning diary". The highest dispersion value amounted to 1.26 and the statement was SILLA9: "I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign". This shows that this value was the most likely to be reflective of individual variation among the participants.

Table 3 Descriptive statistics for the Beliefs about CALL Questionnaire

( $N = 120$ )	Mean	SD
1. I like using the computer to learn English very much.	3.58	0.85
2. Learning English is easier for me using the computer.	3.74	0.73
3. My pace of learning English is faster using the computer compared to traditional methods.	3.12	0.85
4. Learning English is more effective using the computer than using traditional methods.	3.10	0.90
5. Using the computer to learn English is as important as traditional methods.	3.46	0.86

6. Feedback that is provided by the computer after a task is completed is clear.	3.61	0.70
7. I prefer to communicate with other people in English using the computer than face-to-face.	3.34	1.16
8. I prefer using the computer to using a traditional coursebook.	3.18	0.97
9. When I use CALL I am less stressed.	3.35	0.89
10. Using CALL I have easier access to additional information.	3.78	0.75
11. The CALL environment enables me to develop all the language skills (reading, writing, listening and speaking).	3.41	0.67
12. The CALL environment enables me to develop reading comprehension skills.	3.51	0.66
13. The CALL environment enables me to develop listening comprehension skills.	3.55	0.66
14. The CALL environment enables me to develop speaking skills.	2.91	0.74
15. The CALL environment enables me to extend vocabulary knowledge.	3.74	0.67
16. The CALL environment enables me to understand grammar rules.	3.57	0.73
17. CALL helped me to become an independent learner.	3.22	0.65
18. I use an online or electronic dictionary, e.g., on DVD-ROM to learn English.	3.83	1.13
19. I use a word processor (e.g., Microsoft Word) to create documents in English and I use such functions as spell check or thesaurus.	3.19	1.16
20. I use websites in English (e.g., online newspapers, entertainment websites).	4.13	0.91
21. I use websites in English to read scientific articles (e.g., www.sciencedaily.com, www.newscientist.com).	3.08	1.14
22. I use English corpora (e.g., British National Corpus) for learning.	1.99	0.87
23. I use websites designed to learn English.	2.20	1.02
24. I use English to communicate with other people by means of the computer (e.g., using e-mail).	3.78	1.06
25. I use English to communicate with other people by means of the computer (e.g., using forums).	3.68	1.13
26. I use English to communicate with other people by means of VoIP communicators (e.g., Skype).	3.04	1.28
27. I use English to communicate with other people by means of social networks (e.g., Facebook).	3.69	1.16

As regards the participants' responses on the CALL survey, descriptive statistics calculated for the 27 items of the instrument are reported in Table 3. It should be noted that the highest mean scores were determined for the following statements: CALL20: "I use websites in English (e.g., online newspapers, entertainment websites)" ( $M = 4.13$ ,  $SD = 0.91$ ); CALL18: "I use an online or electronic dictionary, e.g., on DVD-ROM to learn English" ( $M = 3.83$ ,  $SD = 1.13$ ); CALL10: "Using CALL I have easier access to additional information" ( $M = 3.78$ ,  $SD = 0.75$ ); CALL24: "I use English to communicate with other people by means of the computer (e.g., using e-mail)" ( $M = 3.78$ ,  $SD = 1.06$ ); CALL2: "Learning English is easier for me using the computer" ( $M = 3.74$ ,  $SD = 0.73$ ); and CALL15: "The CALL environment enables me to extend vocabulary knowledge" ( $M = 3.74$ ,  $SD = 0.67$ ). By contrast, the lowest mean scores were observed for such items as: CALL14: "The CALL environment enables me to develop speaking skills" ( $M = 2.91$ ,  $SD = 0.74$ ); CALL22: "I use English corpora (e.g., British National Corpus) for learning" ( $M = 1.99$ ,  $SD = 0.87$ ); and CALL23: "I use websites designed to learn English" ( $M = 2.20$ ,  $SD = 1.02$ ).

It was also observed that the standard deviation values were high in some cases, which means that certain statements were subject to substantial individual variation. In particular, it was visible in the following statements: CALL26: "I use English to communicate with other people by means of VoIP communica-

tors (e.g., Skype)" ( $SD = 1.28$ ); CALL7: "I prefer to communicate with other people in English using the computer than face-to-face" ( $SD = 1.16$ ); CALL19: "I use a word processor (e.g., Microsoft Word) to create documents in English and I use such functions as spell check or thesaurus" ( $SD = 1.16$ ); and CALL27: "I use English to communicate with other people by means of social networks (e.g., Facebook)" ( $SD = 1.16$ ). On the other hand, there were some questionnaire items in which the standard deviation values were low, which may indicate that the learners' responses were relatively similar, clustering around the mean. It was visible in such statements as: CALL12: "The CALL environment enables me to develop reading comprehension skills" ( $SD = 0.66$ ); CALL13: "The CALL environment enables me to develop listening comprehension skills" ( $SD = 0.66$ ); and CALL17: "CALL helped me to become an independent learner" ( $SD = 0.65$ ).

The 27 Likert-scale items of the CALL questionnaire were accompanied by one open-ended question, which was CALL28: "Do you use the computer to learn English in any other way? If yes, please specify". There were 14 students who answered this question and claimed that they used the computer to learn English in the following ways: watching films and/or sitcoms, reading instructional materials and technical articles, using computer programmes (e.g., *Professor Henry*), playing computer games (e.g., memory games), listening to music, using e-books, singing karaoke songs in English, looking for useful information, or writing songs texts in English. All of the students' responses indicated that the participants had positive attitudes towards the use of computers in learning English as an FL, with the caveat that the applications of computers that the subjects appreciated the most were using online or electronic dictionaries or using various websites in English in order to look for information or to entertain. The participants also stated that using the computer helped them to extend their vocabulary in English.

Table 4 The means and paired samples t-tests for the *Speaking Tasks* (within groups)

(N= 120)	Pretest				Posttest				t	Effect size (eta squared)
	Min	Max	Mean	SD	Min	Max	Mean	SD		
	16	27	20.33	2.56	14	28	21.35	2.62		

\*  $p < .05$

As can be seen from Table 4, which presents descriptive statistics calculated for *Speaking Tasks 1* and *2*, the mean value for *Speaking Task 1* amounted to 20.33 ( $SD = 2.56$ ) with minimum and maximum values amounting to 16 and 27, respectively, with the caveat that the mean value was slightly higher on the *Speaking Task 2*, equaling 21.35 ( $SD = 2.62$ ) with comparative values of minimum

and maximum values equal to 14 and 28, respectively. As mentioned earlier in Section 3.3. of the present paper, paired samples *t*-tests were conducted for the *Speaking Tasks* in order to inspect whether statistically significant differences within groups could be proved. As illustrated in Table 4, the mean value increased from the pretest to the posttest by 1.02, a gain that was significant and of large effect magnitude (eta squared amounting to .41).

Table 5 Correlation analysis for all the variables

	SILL	CALL	ST1	ST2
SILL				
CALL	.48*			
ST1	.16	.06		
ST2	.06	.00	.89*	

\* $p < .05$ 

Table 6 Correlations analysis for particular SILL components

Strategies	ST1 ( <i>N</i> = 118)	ST2 ( <i>N</i> = 118)
Memory	.04	-.03
Cognitive	.25*	.16
Compensation	.11	.05
Metacognitive	.07	-.04
Affective	.09	.07
Social	.05	-.05

\* $p < .05$ 

As regards correlation analysis results obtained in the course of the study, they are shown in Tables 5 and 6. To be more precise, Table 5 shows that the correlations between the variables investigated in the study, that is the use of LLSs, students' beliefs about CALL and FL speaking outcomes, were small and medium, all of them being positive. The highest positive statistically significant ( $p < .05$ ) correlation was found between the SILL and the CALL ( $r = .48$ ) with the variables accounting for about 23% of the variance in each other. Table 6, in turn, presents the relationships between the use of the six different categories of LLSs and the achievement measures selected for the purpose of the study, namely the *ST1* and the *ST2*. It should be noted that a range of small correlations were detected between the variables, with some of them being positive and others negative. As regards the correlations that were statistically significant ( $p < .05$ ), they were only detected between cognitive strategies and the *ST1* ( $r = .25$ ), with the construct accounting for about 1% of the variance.

What comes as a surprise is the fact that the relationship between the use of memory strategies, affective strategies, social strategies, and the achievement

measures proved to be extremely weak and statistically insignificant, and in quite a few cases negative correlations were identified. Since correlations only indicate the relationship between different variables without determining causality, it can only be hypothesized that learners who use a number of language learning strategies can obtain higher scores on achievement tests, with the caveat that the relationship could in fact be reciprocal.

#### 4. Discussion

It should be stated that the picture that emerges from the findings reported in Section 3.4. of the current paper is exceedingly complex and in some cases relatively difficult to interpret. Furthermore, although the data collected for the purpose of this research project did not always yield the kind of insights into the issues under investigation the current researcher would have hoped for, they were still sufficient to provide responses to the aforementioned research question, some of which were more definite than others.

The main research question dealing with the relationship between the use of the ESP learners' LLSs, their beliefs about CALL, and FL attainment on the pre- and post-tests, is difficult to address for the simple reason that some of the observed correlations were negligible and not statistically significant. In the first place, it was found that the students' beliefs about CALL were related to their language learning strategy use, a finding that can be accounted for by the fact that both variables refer to FL learners' autonomy development or 'taking charge' of their own learning process. Therefore, it is not surprising that there exists some kind of interrelationship between these two factors. As regards the relationship between the learners' beliefs about CALL and FL attainment measured by the *Speaking Tasks*, the results can be regarded as less promising as no statistically significant correlations were found between the CALL variable and the ST tests scores. At first blush, these research findings might be viewed as inexplicable since, also in line with the results of previous research on the relationship between beliefs about CALL and oral proficiency (e.g., Blake et al., 2008) or writing outcomes (e.g., Jafarian et al., 2012; Sullivan & Pratt, 1996), it could be assumed that students' preferences should have a bearing on their ultimate level of attainment. In fact, such an assumption might be overly simplistic given that different types of instruction, e.g., *face-to-face*, *online* or *blended learning* may be viewed as equally beneficial in various situations by the very same participants, which makes it extremely difficult to detect a direct link with FL achievement.

As mentioned earlier, the second part of this research question concerned the relationship between the use of different categories of language learning strategies and the two achievement measures, namely *Speaking Tasks 1* and *2*.

What comes as a surprise is that the relationship between the use of the six categories of LLSs and FL attainment proved to be extremely weak and mostly statistically insignificant, with the caveat that in many cases negative correlations were identified, in particular for *Speaking Task 2*. In the first place, the strongest positive relationship was found between the use of cognitive strategies and the outcomes of *Speaking Task 1*. It should be kept in mind that no meaningful correlations were found out between the use of the six categories of LLSs and *Speaking Task 2*. A pertinent question to ask at this point is not only why the investigation failed to reveal stronger relationships between the use of the different types of language learning strategies and FL speaking attainment but also why so many negative, albeit weak, correlations were detected. One possible explanation of the predominance of weak relationships and the occurrence of a considerable number of negative correlations is that the aforementioned data collection instruments, *Speaking Task 2* in particular, might not be fully adequate measurement tools to provide valid information concerning the measurement of FL attainment. Therefore, having this assumption in mind, in future studies of this kind, it might be advisable to seek a relationship between the use of LLSs and the scores of different subcomponents of these achievement measures with a view to detecting more subtle relationships.

The picture that emerges from the outcomes of the current study is far from clear on account of the fact that, although several generalizations and recommendations are certainly warranted, methodological considerations abound and a number of crucial questions are still left unanswered, with the effect that there is a vital need for more meticulously designed research projects. One of the most crucial areas that are in need of empirical investigation is, for example, the intricate interplay between the different categories of LLSs, FL speaking attainment and students' beliefs about CALL. It should be emphasized that the directions for further research proposed above are only tentative.

## 5. Conclusion

Although there have been numerous studies on the role of individual differences in learning and teaching a foreign language, only a handful of them have addressed this issue in the CALL environment. The empirical investigation reported in the present paper has sought to remedy this situation. Obviously, the current study represents merely the first step in this direction as it is one of the initial ones to investigate this problem. The main aim of this paper has been to explore the relationship between the use of LLSs and FL speaking attainment in a blended learning environment. The main finding of the current study is that there exists some kind of relationship between LLSs and learners' beliefs about

CALL. The results of the study also indicate that, in the case of technical university students who learn English for Specific Purposes, FL speaking attainment is influenced by such factors as language learning strategies, in particular cognitive strategies. On the other hand, no statistically significant relationships were determined between other LLSs, FL speaking outcomes and students' beliefs about CALL. Such trajectory is in line with the assumptions of the chaos/complexity theory (Larsen-Freeman, 2013, p. 1), referring to dynamic systems which: "(...) are sensitive to initial conditions, a characteristic popularly referred to as the butterfly effect, whereby even the flapping of a single butterfly's wing in one part of the world can have an effect on a weather system in another. It is the sensitivity to initial conditions that makes complex systems chaotic-they can change in unpredictable ways".

The results of the study unambiguously demonstrate that there is an urgent need for more meticulously designed research as numerous important questions are still left unanswered in the area of individual learner variables and FL speaking outcomes. In subsequent studies of this kind, it might be advisable to seek a relationship between the use of different categories of language learning strategies, FL speaking outcomes and students' beliefs about CALL in the hope of detecting more meaningful relationships. Furthermore, the outcomes of other studies show that the list of learner variables affecting FL attainment in the CALL environment includes many more factors than the ones described in this paper, for example anxiety (Huang & Hwang, 2013; Tallon, 2009; Ushida, 2005; White, 2014). Thus, exploring the intricate interplay between these variables and computer-aided FL instruction could be interesting; however, it is clearly indispensable to carry out relevant studies in settings to which their findings will eventually be applied. Although research into the role of various LLSs and FL speaking attainment in the CALL environment is an arduous task in view of the fact that it requires the use of special software, the development of specific online and face-to-face tasks, as well as meticulous analysis of copious amounts of quantitative and qualitative data, it is clearly a worthwhile undertaking.

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## Appendix A

### Questionnaire about language learning

Szacowany czas: 30 min.

Uprzejmie proszę o wypełnienie kwestionariusza dotyczącego nauki języków obcych, będącego częścią moich badań w tej dziedzinie. Ponieważ kwestionariusz ten nie jest testem, nie ma „poprawnych” lub „błędnych” odpowiedzi. Bardzo proszę o rzetelne jego uzupełnienie, gdyż tylko szczerze odpowiedzi mogą gwarantować sukces moich badań. Dziękuję za współpracę i poświęcony czas na wypełnienie kwestionariusza.

*Wszystkie informacje z tego kwestionariusza pozostaną w pełni anonimowe. Pomimo tego, że autorka prosi o podanie imienia i nazwiska na pierwszej stronie, jest to związane wyłącznie z koniecznością powiązania informacji z kilku ankiet przeprowadzonych w późniejszym czasie.*

Imię i nazwisko studenta \_\_\_\_\_

### Część I Ogólne informacje

#### A. Ogólne informacje o studentach

*Proszę wyrazić opinię lub udzielić odpowiedzi na następujące pytania wstawiając znak „X” w odpowiednim miejscu.*

1. **Płeć**

mężczyzna  kobieta

2. **Wiek, proszę określić** \_\_\_\_\_

3. **Profil studiów**

stacjonarne  niestacjonarne

4. **Język, którego używa się w domu**

polski  inny, proszę określić \_\_\_\_\_

5. **Rok studiów**

pierwszy  drugi  trzeci

6. **Semestr nauki języka obcego na uczelni**

pierwszy  drugi  trzeci  czwarty

7. **Kierunek studiów (proszę zaznaczyć jedną opcję)**

- |   |  |
|---|--|
| <input type="checkbox"/> Architektura i planowanie przestrzenne | <input type="checkbox"/> Informatyka               |
| <input type="checkbox"/> Edukacja Artystyczna                   | <input type="checkbox"/> Matematyka                |
| <input type="checkbox"/> Inżynieria Biomedyczna                 | <input type="checkbox"/> Inżynieria Bezpieczeństwa |

- |   |   |
|---|---|
| <input type="checkbox"/> Mechanika                          | <input type="checkbox"/> Logistyka                      |
| <input type="checkbox"/> Zarządzanie i Inżynieria Produkcji | <input type="checkbox"/> Transport                      |
| <input type="checkbox"/> Elektronika i Telekomunikacja      | <input type="checkbox"/> Technologie Ochrony Środowiska |
| <input type="checkbox"/> Automatyka i Robotyka              | <input type="checkbox"/> inny, proszę określić _____    |

### B. Ogólne informacje na temat nauki języka angielskiego

*Proszę wyrazić opinię lub udzielić odpowiedzi na następujące pytania wstawiając znak „X” w odpowiednim miejscu.*

1. Powodem, dla którego uczę się języka angielskiego jest fakt, że (można zaznaczyć kilka odpowiedzi)

- |  |  |
|--|--|
| <input type="checkbox"/> jest on przedmiotem obowiązkowym na mojej uczelni | <input type="checkbox"/> chciał(a)bym wyjechać za granicę        |
| <input type="checkbox"/> lubię uczyć się tego języka                       | <input type="checkbox"/> chciał(a)bym dostać dobrze płatną pracę |
| <input type="checkbox"/> chciał(a)bym mieć certyfikat językowy             | <input type="checkbox"/> chciał(a)bym mieć dobre oceny           |
| <input type="checkbox"/> inny, proszę określić _____                       |  |

2. Używam języka angielskiego (proszę określić gdzie)

- podczas zajęć na uczelni
- uczęszczam na prywatne lekcje
- uczęszczam na zajęcia do szkoły językowej
- wyjeżdżam za granicę
- rozmawiam z kolegą/ koleżanką z innego kraju
- inny, proszę określić \_\_\_\_\_

3. Używam języka angielskiego (proszę określić jak często i w jakim celu)

- co dzień w celu \_\_\_\_\_
- raz w tygodniu w celu \_\_\_\_\_
- dwa razy w tygodniu w celu \_\_\_\_\_
- inny, proszę określić \_\_\_\_\_

4. Czy Pan/Pani pracuje?

- tak  nie

5. Jeśli tak, czy w pracy używany jest język angielski?

- tak  nie

6. Do nauki języka angielskiego służą mi (można zaznaczyć więcej niż jedną odpowiedź)

- |  |  |
|--|--|
| <input type="checkbox"/> programy telewizyjne      | <input type="checkbox"/> programy komputerowe            |
| <input type="checkbox"/> radio                     | <input type="checkbox"/> wykonywane rozmowy telefoniczne |
| <input type="checkbox"/> Internet                  | <input type="checkbox"/> gry komputerowe                 |
| <input type="checkbox"/> oglądanie filmów          | <input type="checkbox"/> mail                            |
| <input type="checkbox"/> czytanie książek          | <input type="checkbox"/> videokonferencje                |
| <input type="checkbox"/> czytanie czasopism, gazet | <input type="checkbox"/> inne, proszę określić _____     |

7. Językiem wiodącym, na którego zajęcia uczęszczam na uczelni jest język  
 angielski                       niemiecki                       hiszpański  
 francuski                       rosyjski
8. Czy zna Pan/ Pani inne języki obce?  
 tak  nie
9. Jeśli tak, jaki to język/ języki? (można zaznaczyć kilka odpowiedzi)  
 angielski                       niemiecki                       hiszpański  
 francuski                       rosyjski                       inny, proszę określić \_\_\_\_\_
10. Czy kiedykolwiek był(a) Pan(i) w kraju angielskiego obszaru językowego?  
 tak  nie
11. Jeśli tak, jak długi był pobyt? Proszę określić \_\_\_\_\_
12. Jak długo uczy się Pan(i) języka angielskiego? Proszę określić \_\_\_\_\_
13. Czy posiada Pan(i) jakikolwiek certyfikat potwierdzający znajomość języka angielskiego? (np. a certyfikat biznesowy lub certyfikat Cambridge)  
 tak  nie
14. Jeśli tak, jaki certyfikat Pan(i) posiada?  
 FCE                                       TELC  
 CAE                                       TOEFL  
 CPE                                       TOEIC  
 BULATS                                 inny, proszę określić \_\_\_\_\_

## Część II Komputerowe wspomaganie nauki języków obcych

### A. Ogólne informacje dotyczące użycia technologii

*Proszę wyrazić opinię lub udzielić odpowiedzi na następujące pytania wstawiając znak „X” w odpowiednim miejscu.*

1. Od jak dawna używa Pan(i) komputera? Proszę określić \_\_\_\_\_
2. Czy ma Pan(i) komputer w domu?  
 tak  nie
3. Jeśli tak, ile godzin spędza Pan(i) używając komputera tygodniowo? Proszę określić \_\_\_\_\_
4. Czy ma Pan(i) dostęp do łącza internetowego z szybką transmisją danych?  
 tak  nie

5. Jeśli tak, proszę określić gdzie

- w domu                       na uczelni                       w pracy  
 inne, proszę określić \_\_\_\_\_

6. Ile godzin spędza Pan(i) tygodniowo używając Internetu? Proszę określić \_\_\_\_\_

7. Do czego najczęściej używa Pan(i) Internetu biorąc pod uwagę naukę języków obcych? (można zaznaczyć kilka odpowiedzi)

- zbieranie informacji                       granie w gry komputerowe                       prowadzenie rozmów  
 uczenie się gramatyki,                       czytanie                       inne, proszę określić \_\_\_\_\_  
słownictwa itp.                       przygotowywanie prezen-  
 pisanie i czytanie maili                      tacji

8. Czy kiedykolwiek wziął/wzięła Pan(i) udział w kursie e-learningowym języka angielskiego?

- tak  nie

9. Jeśli tak, kto organizował kurs?

- uczelnia                       szkoła językowa                       inne, proszę określić \_\_\_\_\_

## B. Użycie CALL

*Termin CALL (Computer Assisted Language Learning ) określa komputerowe wspomaganie nauki języków obcych.*

*Proszę uważnie przeczytać poniższe twierdzenia i zaznaczyć z jaką częstotliwością wykonuje Pan(i) dane czynności. Proszę wybrać jedną z odpowiedzi z przedziału od „zdecydowanie się nie zgadzam” do „zdecydowanie się zgadzam”.*

Zdecydowanie się nie zgadzam	Nie zgadzam się	Nie mam zdania	Zgadzam się	Zdecydowanie się zgadzam
1	2	3	4	5

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Bardzo lubię używać komputera do nauki języka angielskiego.   | 1 | 2 | 3 | 4 | 5 |
| 2. Z łatwością przychodzi mi nauka języka angielskiego przy użyciu komputera.                                  | 1 | 2 | 3 | 4 | 5 |
| 3. Moje tempo nauki języka angielskiego przy pomocy komputera jest szybsze w porównaniu do tradycyjnych metod. | 1 | 2 | 3 | 4 | 5 |
| 4. Uczenie się języka angielskiego jest efektywniejsze używając komputera niż tradycyjnych metod nauki.        | 1 | 2 | 3 | 4 | 5 |
| 5. Używanie komputera do nauki języka angielskiego jest tak ważne jak tradycyjne metody nauki.                 | 1 | 2 | 3 | 4 | 5 |
| 6. Informacja zwrotna, którą dostarcza komputer po rozwiązaniu zadania jest ciekawa.                           | 1 | 2 | 3 | 4 | 5 |
| 7. Wolę komunikować się z innymi w języku angielskim przez komputer niż w tradycyjny sposób.                   | 1 | 2 | 3 | 4 | 5 |
| 8. Wolę używać komputera niż tradycyjnego podręcznika do nauki języka angielskiego.                            | 1 | 2 | 3 | 4 | 5 |

9. Kiedy używam CALL jestem mniej zestresowany(a).	1	2	3	4	5
10. Używając CALL mam łatwiejszy dostęp do dodatkowych informacji.	1	2	3	4	5
11. Środowisko CALL daje mi możliwość rozwijania wszystkich umiejętności językowych (czytanie, pisanie, rozumienie ze słuchu i mówienie).	1	2	3	4	5
12. Środowisko CALL daje mi możliwość rozwijania umiejętności czytania ze zrozumieniem.	1	2	3	4	5
13. Środowisko CALL daje mi możliwość rozwijania umiejętności słuchania ze zrozumieniem.	1	2	3	4	5
14. Środowisko CALL daje mi możliwość rozwijania umiejętności mówienia.	1	2	3	4	5
15. Środowisko CALL daje mi możliwość poszerzenia zasobu słownictwa.	1	2	3	4	5
16. Środowisko CALL daje mi możliwość poszerzenia znajomości gramatyki.	1	2	3	4	5
17. CALL pomogło mi stać się uczniem niezależnym.	1	2	3	4	5
18. Używam słownika internetowego lub elektronicznego (np. na DVD) do nauki języka angielskiego.	1	2	3	4	5
19. Używam edytora tekstu (np. Microsoft Word) do tworzenia dokumentów tekstowych w języku angielskim oraz korzystam z takich funkcji jak sprawdzanie pisowni czy tezaursus.	1	2	3	4	5
20. Używam stron internetowych w języku angielskim (np. gazety online, strony poświęcone rozrywce).	1	2	3	4	5
21. Używam stron internetowych w języku angielskim do czytania artykułów o tematyce naukowej (np. <a href="http://www.sciencedaily.com">www.sciencedaily.com</a> , <a href="http://www.newscientist.com">www.newscientist.com</a> ).	1	2	3	4	5
22. Używam korpusów języka angielskiego (np. British National Corpus) do nauki.	1	2	3	4	5
23. Używam stron internetowych przeznaczonych do nauki języka angielskiego (np. <a href="http://www.bbc.co.uk/polish/learningenglish">http://www.bbc.co.uk/polish/learningenglish</a> ).	1	2	3	4	5
24. Używam języka angielskiego do komunikowania się z innymi ludźmi za pomocą komputera (np. poprzez e-mail).	1	2	3	4	5
25. Używam języka angielskiego do komunikowania się z innymi ludźmi za pomocą komputera (np. poprzez fora dyskusyjne).	1	2	3	4	5
26. Używam języka angielskiego do komunikowania się z innymi ludźmi za pomocą komputera poprzez komunikatory VoIP (np. Skype).	1	2	3	4	5
27. Używam języka angielskiego do komunikowania się z innymi ludźmi za pomocą komputera poprzez portale społecznościowe (np. Facebook).	1	2	3	4	5
28. Czy używa Pan/Pani komputera do nauki języka angielskiego w jakiś inny sposób? Jeżeli tak, proszę wymienić w jaki. ....					

## Appendix B

*Strategy Inventory for Language Learning (SILL, Oxford, 1990) – Polish version \**

Szacowany czas: 30 min.

Kwestionariusz SILL dotyczy strategii uczenia się i jest przeznaczony dla studentów, których drugim językiem lub językiem obcym jest język angielski. Proszę uważnie przeczytać poniższe twierdzenia i zaznaczyć w jakim stopniu są one dla Pana(i) prawdziwe. Proszę wybrać jedną z odpowiedzi z przedziału od „zdecydowanie nie” do „zdecydowanie tak”. Ponieważ kwestionariusz ten nie jest testem i nie ma „poprawnych” lub „błędnych” odpowiedzi, proszę o rzetelne jego uzupełnienie.

*Wszystkie informacje z tego kwestionariusza pozostaną w pełni anonimowe. Autorka tłumaczenia prosi o podanie imienia i nazwiska na pierwszej stronie, ale jest to związane wyłącznie z koniecznością powiązania informacji z kilku ankiet które zostaną przeprowadzone w późniejszym czasie.*

Imię i nazwisko studenta \_\_\_\_\_

Zdecydowanie nie	Raczej nie	Trudno powiedzieć	Raczej tak	Zdecydowanie tak
1	2	3	4	5

## Część A

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Szukam związku pomiędzy tym, co już wiem a nowymi rzeczami, których uczę się w języku angielskim.                                    | 1 | 2 | 3 | 4 | 5 |
| 2. Używam nowo poznanych angielskich słów w zdaniu, po to aby je zapamiętać.  | 1 | 2 | 3 | 4 | 5 |
| 3. Łączę dźwięk nowo poznanego słowa w języku angielskim z obrazkiem lub zdjęciem przedstawiającym to słowo, aby je łatwiej zapamiętać. | 1 | 2 | 3 | 4 | 5 |
| 4. Zapamiętuję nowo poznane słowo w języku angielskim wyobrażając sobie sytuację, w której słowo to mogłoby być użyte.                  | 1 | 2 | 3 | 4 | 5 |
| 5. Używam rymów do zapamiętywania nowo poznanych słów w języku angielskim.  | 1 | 2 | 3 | 4 | 5 |
| 6. Używam kartek z obrazkami do zapamiętywania nowo poznanych słów w języku angielskim.   | 1 | 2 | 3 | 4 | 5 |
| 7. Odgrywam znaczenia słów w języku angielskim.   | 1 | 2 | 3 | 4 | 5 |
| 8. Często powtarzam to, czego nauczyłem(a) się na lekcjach języka angielskiego.   | 1 | 2 | 3 | 4 | 5 |
| 9. Zapamiętuję nowo poznane słowa w języku angielskim kojarząc ich umiejscowienie na stronie, tablicy czy znaku drogowym.               | 1 | 2 | 3 | 4 | 5 |

## Część B

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 10. Kilkakrotnie wypowiadam lub zapisuję nowo poznane słowa w języku angielskim. | 1 | 2 | 3 | 4 | 5 |
| 11. Staram się naśladować sposób mówienia rodzimych użytkowników języka.         | 1 | 2 | 3 | 4 | 5 |
| 12. Ćwiczę wymowę angielskich dźwięków.  | 1 | 2 | 3 | 4 | 5 |
| 13. Używam poznanych słów w języku angielskim na różne sposoby.                  | 1 | 2 | 3 | 4 | 5 |



14. Rozpocynam rozmowy w języku angielskim.	1	2	3	4	5
15. Oglądam programy telewizyjne w języku angielskim lub chodzę do kina na filmy anglojęzyczne.	1	2	3	4	5
16. Czytam w języku angielskim dla przyjemności.	1	2	3	4	5
17. Czytam notatki, wiadomości, listy lub raporty w języku angielskim.	1	2	3	4	5
18. Czytając tekst w języku angielskim najpierw przeglądam go pobieżnie, a następnie uważnie go czytam.	1	2	3	4	5
19. Szukam polskich słów, które są podobne do nowo poznanych słów w języku angielskim.	1	2	3	4	5
20. Staram się znaleźć reguły w języku angielskim.	1	2	3	4	5
21. Staram się znaleźć znaczenie nowo poznanego słowa w języku angielskim poprzez podzielenie go na części, których znaczenie rozumiem.	1	2	3	4	5
22. Staram się nie tłumaczyć słowo w słowo.	1	2	3	4	5
23. Podsumowuję informacje, które słyszę lub czytam w języku angielskim.	1	2	3	4	5

### Część C

24. Aby zrozumieć nieznanne angielskie słowa, zgaduję ich znaczenie.	1	2	3	4	5
25. Kiedy nie mogę przypomnieć sobie słowa w trakcie rozmowy w języku angielskim, używam gestykulacji.	1	2	3	4	5
26. Jeśli nie znam potrzebnego mi słowa w języku angielskim, wymyślam je.	1	2	3	4	5
27. Czytając w języku angielskim nie muszę sprawdzać znaczenia każdego nowego słowa.	1	2	3	4	5
28. Staram się zgadywać, co osoba, z którą rozmawiam w języku angielskim powie dalej.	1	2	3	4	5
29. Jeśli nie mogę sobie przypomnieć słowa w języku angielskim, używam słowa lub wyrażenia o znaczeniu bliskoznacznym.	1	2	3	4	5

### Część D

30. Staram się znaleźć możliwie jak najwięcej sposobów użycia języka angielskiego.	1	2	3	4	5
31. Zauważam błędy, jakie popełniam w języku angielskim i używam tej informacji do poprawy moich umiejętności językowych.	1	2	3	4	5
32. Uważnie słucham, gdy ktoś wypowiada się w języku angielskim.	1	2	3	4	5
33. Szukam sposobów na bycie lepszym uczniem w języku angielskim.	1	2	3	4	5
34. Układam sobie plan zajęć w taki sposób, aby mieć dostatecznie dużo czasu na naukę języka angielskiego.	1	2	3	4	5
35. Szukam osób, z którymi mogę rozmawiać w języku angielskim.	1	2	3	4	5
36. Szukam jak najwięcej okazji do czytania w języku angielskim.	1	2	3	4	5
37. Mam jasne cele dotyczące poprawy umiejętności w języku angielskim.	1	2	3	4	5
38. Myślę o postępach, jakie czynię w języku angielskim.	1	2	3	4	5

### Część E

39. Staram się zrelaksować za każdym razem, kiedy odczuwam obawy związane z używaniem języka angielskiego.	1	2	3	4	5
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- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 40. Zachęcam siebie do mówienia w języku angielskim nawet jeśli obawiam się zrobienia błędu.               | 1 | 2 | 3 | 4 | 5 |
| 41. Nagradzam się, kiedy dobrze idzie mi nauka języka angielskiego.  | 1 | 2 | 3 | 4 | 5 |
| 42. Dostrzegam momenty, w których jestem spięty(a) lub nerwowy ucząc się lub używając języka angielskiego. | 1 | 2 | 3 | 4 | 5 |
| 43. Zapisuję w dzienniczku swoje odczucia dotyczące nauki języka.  | 1 | 2 | 3 | 4 | 5 |
| 44. Rozmawiam z inną osobą na temat tego, co czuję kiedy uczę się języka angielskiego.                     | 1 | 2 | 3 | 4 | 5 |

### Część F

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 45. Proszę inną osobę, aby zwolniła lub powtórzyła jeśli nie rozumiem jego/jej wypowiedzi w języku angielskim. | 1 | 2 | 3 | 4 | 5 |
| 46. Proszę osoby posługujące się językiem angielskim o poprawianie moich wypowiedzi.                           | 1 | 2 | 3 | 4 | 5 |
| 47. Ćwiczę język angielski z innymi studentami.  | 1 | 2 | 3 | 4 | 5 |
| 48. Proszę o pomoc osoby posługujące się językiem angielskim.  | 1 | 2 | 3 | 4 | 5 |
| 49. Zadaję pytania w języku angielskim.  | 1 | 2 | 3 | 4 | 5 |
| 50. Staram się dowiedzieć czegoś na temat kultury osób posługujących się językiem angielskim.                  | 1 | 2 | 3 | 4 | 5 |

Dziękuję za wypełnienie kwestionariusza 😊

Jeżeli macie Państwo jakieś pytania dotyczące kwestionariusza, proszę o kontakt:  
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\* tłumaczenie: Edyta Olejarczuk, autor: Rebecca Oxford (1989)