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Translation as a Vocabulary Teaching Aid in ESP

Olivia CHIROBOCEA-TUDOR*

Abstract: This article represents a part of the more extensive research started in 2018 from the premise that translation activities are in fact very useful in ESP classes when used as language learning technique, as argued with evidence, and continues the previous series of articles that studied this topic. This installment deals with the benefits translation activities have on vocabulary acquisition in ESP when properly implemented in the classroom. The conclusions are based on empirical observations and on the previous research which included a case study regarding learners' attitudes towards this type of activity.

Keywords: ESP, translation, vocabulary acquisition, terminology

1. Introduction

The teaching of skills, which is the main goal of the all-encompassing communicative method, is usually emphasized to the detriment of a more accurate approach to the lexical content. The four skills are a staple and there is no question they should figure prominently in any methodological approach to English language teaching. However, the communicative approach is not a panacea and cannot be fully applied to all learners as it does not completely fulfill their needs, especially in ESP or LSP. Translation and precise equivalence are usually frowned upon in English language teaching methodologies and they are generally viewed as an outdated or reactionary method. Skill acquisition trumps the exactness of lexical acquisition. However, in ESP, the exact meaning of words, phrases or collocations is of great importance as professionals in various fields of work, be it law, finance, science and technology or medicine, need accuracy above all. Translation and equivalence are particularly necessary in this branch of English teaching and they have a considerable

^{*} Associate professor, Ph.D., Department of Modern Languages for Specific Purposes, Faculty of Letters,

[&]quot;Ovidius" University of Constanta, Romania. Email: olivia.ch31@gmail.com

contribution to the acquisition of terminology, a particularly important, though still debated, aspect of ESP. In my previous plea (Chirobocea 2018a) for the use of translation as a language learning technique in ESP (not to be confused with the Grammar Translation method) I emphasized several advantages that many other researchers and theorists have pointed out and supported over time. Leaving aside the many elements that make a case for the use of translation in the ESP class, which I have already covered in my earlier research (Chirobocea 2018a, 2018b and 2018c), I would like to focus here on more practical aspects with concrete examples. After my 2018b study which proved learners' positive attitude to the use of translation and L1 in class, I would like to focus in this article on more practical aspects, particularly on the impact translation activities have on vocabulary acquisition.

2. Background

ESP teachers do not train translators, therefore translation in ESP should not be a goal in itself, nor should it be taught as a skill although some may argue it is a skill (Fernández-Guerra 2014: 155, Kic-Drgas 2014: 258). Also, it should not be used as a method, but as a supplementary technique that has often proved useful, as emphasized by various researchers (Ali 2012, Atkinson 1987 and 1993, Mattioli 2004, Kavaliauskienë and Kaminskienë 2007). Nor should translation be used as an assessment device but as a teaching device (Pouya 2012: 6501), since learners, as they reach maturity in their field, should be able to write their research directly in English and not as a translation from L1 into L2 (Micic 2008: 176). They should develop those skills that will help them reach such a level of proficiency and translation is a technique that can help with this endeavor.

As other researchers, as well as my own previous findings have already emphasized, translation is not a substitution game but a more elaborate process that involves complex cognitive processes (Ali 2012, Chirobocea 2018a). It is a productive skill which Kirsten M. Hummel likens to 'elaboration' in a criticism of previous research that placed translation in the same category as repetition (Hummel 2010: 61). In fact, Hummel goes deeper and links elaboration to memory concluding that "exposure to translation equivalents and active translation may be considered as allowing deeper and more elaborated processing therefore may facilitate retention (Hummel 2010: 63). Also,

[...] exposure to translation equivalents may entail an increased set of interconnections, resulting in a more elaborate set of memory traces associated with the L2 structures. In addition, active translation is likely to entail more extensive analysis in that it requires the learner to construct the translation equivalent (Hummel 2010: 64).

This is linked to other studies that found a strong connection between the difficulty of the task and the degree of retention, namely the more difficult the translation, the higher the chances of better retention, as discussed by Hummel

(Hummel 2010: 64). Other studies corroborate such conclusions by analyzing the link between guessing meaning and retention of vocabulary. For example, Mondria and De Boer's 1991 study concludes that a context rich in semantic clues will "result in improved guessing, but not in improved retention" (Mondria and De Boer 1991: 262). It would be fair thus to agree with Hummel and conclude that the simpler the task, the lower the degree of retention. This means that efficient translation activities focus on vocabulary acquisition should favor L1 to L2 instead of L2 to L1, and should not shy away from complexity and difficulty.

3. Implementation of translation activities

Before delving into implementation, I will give the context in which I have worked for many years and which has led me to the conclusions discussed in this article. My students are normally enrolled in natural sciences programs such as biology, ecology, agriculture and horticulture (1st and 2nd year), which means I have worked mainly with scientific English. Translation activities work better in this domain because the learners' needs are less communicative and more focused on writing and reading, therefore they are more inclined towards extracting benefits from translation activities and also more prone to translate on their own, for example, materials they might need for their study or research.

The students' English level is generally intermediate, with some extremes, namely some advanced ones and some beginners. These levels of proficiency have been a constant over the years. These are the same students on which I conducted a study in 2018 with promising results as the majority had positive sentiments towards the efficiency and usefulness of translation activities (Chirobocea 2018b). Encouraged by the students' positive feedback, I continued to use translation activities in class and strived to focus them more keenly on certain aspects such as terminology and other elements specific to English for science. Time limitations often curtail the enthusiasm for such activities. Some classes are two hours once a week while others are two hours every other week, therefore a teacher feels compelled to include as much as possible, as clearly and as enjoyably as possible to maximize retention and learning.

Thus, after considering the learners' English level, their level of scientific knowledge, aspects related to the time allotted to the English class, here are some aspects regarding implementation. A translation activity can have any position during a lesson. It can introduce new terminology or it can revise it, after a reading activity for example, or at the very end of the lesson. The latter option is often used more than the former as translation employed as revision practice for vocabulary that has recently been taught will "give learners practice in producing a particular area of English, not just understanding it." (Atkinson 1993: 62). Such activities will also inform the teacher which lexical or other structures are problematic (Mahmoud 2006: 31).

In my experience, students tend to be more focused on these activities and pay more attention. My strategy is not to impose constrains or limit creativity. On the contrary, I usually insist on reminding the students that most translations are not set in stone and there is often more than one way of saying something in English, offering them more freedom and thus reducing some of the fear they usually experience in productive activities when they may feel in the spotlight. The door is open to a relaxed atmosphere encouraging discussions, alternative versions or questions. According to Nolasco, translation activities should encourage students' creativity as they should feel at ease to contribute their ideas and to make determinations on what they want to say, while the activity itself and the language used should have a clear purpose (Nolasco 1995: 59), which is especially important in ESP. A similar conclusion is reached by Sofija Micic who suggests translation activities should involve collaboration, discussions, suggestions for alternatives and advice on terminological research strategies such as reading more specialized texts in the field (Micic 2008: 177).

Unfortunately, time limitations and the necessity to include other activities in one lesson will often keep this activity short and concise, which is also an advantage as more clearly focused activities prevent boredom. For example, during the translation activities, the students are allowed to use glossaries or online dictionaries and are encouraged to peruse and use the vocabulary taught in the previous lessons and the current one. Time issues prevent this activity from lasting too long, therefore, after the students offer their version, the teacher will often intervene and offer more options, explain the choice of words or ask students to deduce why one term and not another is more appropriate.

4. Lexical aspects that translation activities can improve

Here are some of the most common lexical aspects translation activities can help learners retain better, faster and more accurately.

4.1. Spelling

Solving translation activities forces the learners to actually write. When they practice other types of activities such as multiple choice or matching terms with definitions they do not have to write anything. Even in activities more conducing to writing (fill in blanks or finding certain words of phrases in a text), learners often avoid writing by using a number instead or by underlining the phrases directly in the text, even though the teacher may insist they should actually write. But when they translate, they have to actually write and that is always useful, whether they write by hand or using a keyboard. Writing improves memorization, especially in terms of spelling which is particularly problematic in ESP because many specialized words have a complicated spelling that may prove difficult even for native speakers (e.g. *photosynthesis*,

eutrophication, erythrocyte, mitochondrion, hemorrhage, corpus callosum, medulla oblongata, hydrochloric acid, hypophysis, encephalon etc.).

In terms of spelling, translation can also emphasize subtle differences between certain words in L1 and L2 by pointing that although they are very similar, they are not identical, such as embryo which is embrion in Romanian, and thus has an extra 'n' at the end, apart from the 'i'-'y' substitution. In fact, there are many such small differences in the case of biology terminology, given that most highly specialized terms have a common Latin or Greek etymology and thus certain orthographic anglicization patterns arise such as 'f' turning into $(faringe \rightarrow pharynx),$ 't' into (trombocită→thrombocyte), 'th' (embrion \rightarrow embryo), the doubling of certain letters (polen \rightarrow pollen), and many others that have already been covered in my previous research (Chirobocea 2019). Other such subtle differences may concern, for example, prefixes, suffixes and endings. Thus, the prefix 'des-' or 'dez-' in Romanian is not paralleled completely in English: sânge dezoxigenat, acid dezoxiribonucleic and descompunere in Romanian are deoxygenated blood, deoxyribonucleic acid and decomposition in English. In addition, certain adjectives that may appear very similar in Romanian and English have in fact a slightly different ending: agent pathogen → pathogenic agent or efect $antimicrobian \rightarrow antimicrobial effect.$

The differences between British English and American English spelling can also be emphasized when such vocabulary is relevant and part of the lesson. It may be confusing for learners so, while it is useful to point out these differences and explain their existence, it may be prudent to advise them to consistently choose one of the spelling types every time. Such common differences between British and American orthography are: -ae-→-e- (haemoglobin→hemoglobin), -oe-→-e- (oesophagus→esophagus) or endings such as -re→-er (metre→meter), -our→-or (behaviour→behavior) or -ical→-ic (morphological→morphologic).

Spelling issues for sub-technical terms can also be practiced or emphasized in translation, such as the difference between writing two words together or separately and how they change meaning: *buildup* (noun) vs. *build up* (verb), *breakdown* (noun) vs. *break down* (verb), *makeup* (noun) vs. *make up*, or *freshwater* (noun) vs. *fresh water* (adjective + noun).

4.2. Disambiguation, synonymy, polysemy and semantic differences

Disambiguation is a very important aspect of language that can be practiced extensively in translation activities because it involves the difficult task of choosing the correct word from a list of unexplained synonyms existing in dictionaries (Micic 2008: 175). In ESP this is particularly important because certain words are used only in the specialized context. For example, the words *coajă* and *sâmbure* have very many specific equivalents in English and, without practice and knowledge of the context, it is rather difficult to choose for *coajă* among *skin*, *bark*, *peel*, *rind*, *hull*, *husk* etc., or for *sâmbure* among *pip*, *stone*, *pit*, *kernel* etc. Using them often in

appropriate situations, for example in context-specific translation activities, will reinforce their correct usage. Of course, for these examples, more specialized terminology, such as *exocarp*, *mesocarp* and *endocarp* would solve the problem of choosing, given the appropriate context and audience.

In a different example, students tend to translate solutie apoasă as watery solution because apos in Romanian accounts for the subtle semantic difference covered in English by two separate words, aqueous and watery. The distinction is that while watery generally means diluted, containing too much water or soggy, aqueous is a technical term which points to the fact that a solution contains mainly water and is used in chemistry or biology. Thus, while the Romanian apos can be used in both contexts, watery and aqueous are not interchangeable in English. Another example is the Romanian word uscat which covers the semantic range expressed by dry and dried in English. And while at a first glance, there is no significant difference between the English words either, in fact, in specialized context, there is. Thus, while dry fruit is a botanical category and is the opposite of fleshy fruit (drupes, berries etc.), dried fruit refers to specially dehydrated fruit for human consumption (dried figs, dried dates etc.). Another example is the Romanian superior and its antonym inferior which is used for both plante superioare \neq plante inferioare and vena cavă superioară \(\neq \) vena cavă inferioară, while in English the adjective differs according to context: superior vena cava and inferior vena cava but higher plants and lower plants. This happens because the English language is very sensitive to accuracy, just like in the examples above. Thus, while higher plants refer to the ranking within a hierarchy, therefore higher/lower are appropriate, superior vena cava refers to the location in the human body, therefore superior/inferior are appropriate. The Romanian superior/inferior, however, cover both meanings. A similar example where English makes the difference in meaning is the Romanian coarne. Both cows and deer have coarne. However, in English, cows have horns and deer have antlers. Horns are permanent keratin projections (more similar to nails or hair) while antlers are bone extensions (https://www.nps.gov/articles/yell-horns-vs-antlers.htm). While the students specializing in the field may be aware of the differences in L1 mentioned in all the examples offered above, it is important to explain these distinctions in L2 and best practice them by means of translations.

The same occurs in reverse, namely words in English that can be translated differently in L1, which is Romanian in this case. Examples such as *vein* or *male/female* are illustrative because these words are common in scientific contexts and are translated differently into Romanian in a botanical sense compared to a human anatomy context. *Vein* is *nervură* in botany (part of the leaf structure) and *venă* (blood vessel) in anatomy. In both cases, the general meaning is in fact similar as both *nervură* and *venă* are structures within a circulatory system, whether in plants or humans. Similarly, *male/female* is translated *masculin/feminin* in a human context but *bărbătesc/femeiesc* in a botanical context. Thus, if it even requires repetition, context matters and "translation errors often occur because words are not translated in

isolation and the context almost always has some effect on the meaning." (Micic 2008: 175).

There are situations where there are specific words that are normally used in English for certain specialized terms and they do not correspond directly with the L1 word used in the same context. For example, the various 'liquids' in the human body are lichid in Romanian, but fluid in English: lichid sinovial synovial fluid and lichid cefalorahidian cerebrospinal fluid. Similarly, tesut lemnos and tesut liberian are not woody tissue and liberian tissue, but xylem tissue and phloem tissue. Also, acizi grași are not fat acids, but fatty acids. All these and many more can be reinforced by using translation, an exercise that involves cognitive processes and elaboration, therefore not just a passive process of substituting L1 words with L2 words.

The 'which to choose' question also occurs often in ESP contexts, especially when it comes to considering the register and the audience (Micic 2008: 174). In the formal context of academic writing, for example, the words used in common language by non-professionals will be replaced by more appropriate specialized words. Thus, more formal choices should always be preferred in such contexts (clavicle, tibia, patella, thrombus, insect and drupe are preferable to collarbone, shank, kneecap, clot, bug, and stone fruit) as scientific articles or presentations and the students should learn to make the difference.

Here is an example of possible discussions raised by a context and the choice of words:

L1	L2
Tendonul lui Ahile prinde muşchiul	Achilles tendon attaches the calf
gambei de osul călcâiului.	muscle to the heel bone.

Several issues are discussed and clarified in this sentence. The phrase tendonul lui Ahile in Romanian implies a possession, therefore Romanian students will tend to translate Achilles's tendon. Another problem is the verb prinde. The first meaning that comes to mind is catch. However, catch is not appropriate in this context, so a discussion about the appropriate choice of verb as well as its correct preposition is most useful. Then the other two specialized terms are discussed. For each there is a common and a more specialized version, therefore there is question of register and target audience as there is a choice between calf muscle / gastrocnemius and heel bone / calcaneus. For Achilles tendon as well there is another option, calcaneal tendon. Thus, a simple sentence involved cognitive processes, semantic decisions as well as enrichment of vocabulary and discussions about accuracy and context.

Other examples may be: Puietul dă rădăcini noi or Mă mănâncă ochiul where the verbs cannot be translated using their first choice equivalent. Dă means gives and manâncă means eats. Examples like these invite logic and common sense to reject these options and think of more appropriate ones, in this case a da rădăcini = to grow roots and a mânca = to itch. The large number of similar examples reinforces

the fact that "the basic meaning of a word in a dictionary may not be the same as the meaning it will have in the context in hand" (Micic 2008: 175).

Often students rush and jump to conclusion, especially in specialized contexts where they have already noticed there are many similarities between L1-Romanian and L2-English in terms of terminology and make assumptions such as clorhydric acid (for hydrochloric acid) or composed leaf (for compound leaf) because of the Romanian acid clorhidric and frunză compusă. Many other similarly erroneous assumptions can be corrected and dismissed by practicing translation activities and making a conscious choice to use the correct terms. Alongside this issue comes the students' tendency, especially when their English level is not very good, to use a computer translation program, usually online, and thinking they easily solved the problem. As machine-translation is a complex topic extensively discussed by specialists, I will only mention that this solution is in most cases not the right one, especially for highly specialized texts. A machine has a dictionary-like memory full of words and often does not choose the most appropriate one, rendering most amusing, if not completely erroneous results such as welded elytra for elitre sudate or previous legs for picioare anterioare. A discussion such as the one exemplified above and knowledge of the scientific field would have rendered the correct terminology if the human brain rather than the machine brain would have been used.

4.3. Cognates and negative transfer

Atkinson defines the term cognate as "a word which has a very similar form in two different languages" (Atkinson 1993: 59) and clarifies the difference between true cognates and false cognates or false friends. He also encourages the teachers to expose their students to as many false friends as possible because pointing them out will improve learning and avoid mistranslation problems (Atkinson 1993: 60, Ross 2000). Some of the false friends I encountered often in my ESP classes are: preservative, stamina, cord, recipient and others. Prezervativ means condom in Romanian, and thus the word preservative in English will sometimes elicit laughter before its meaning is clarified. Stamina means stamen in Romanian but endurance in English, so not true cognates. Cord is a more scientific term for heart in Romanian therefore some students will assume it means the same in English too.

Negative transfer can be a topic on its own because it involves a bigger discussion and many complex issues. However, I will offer a few examples here because translation activities can solve many of these issues, some very common in ESP contexts. Students often have problems with word order, definite articles, the pronoun *it* and many other elements. Word order involves many aspects but I will limit the discussion to one that I encounter very often in class, namely the position of the adjective. Because in Romanian the position of the adjective is after the noun, this poses some problems to Romanian learners when there is more than one adjective. Thus, in a sentence such as *Florile regulate și neregulate sunt polenizate de vânt sau insecte* the two adjectives *regulate* and *neregulate* describe the main characteristics of

the noun *florile* and should therefore be grouped together in English before the noun they describe. The students tend to notice only what comes immediately after the noun and therefore will translate *The regular flowers and irregular are pollinated* etc. Thus, translation activities can often reiterate the discussion about the position of adjectives and reinforce the rules, also pushing the learners to look beyond the next word and see the bigger picture. Similarly, as there is no corresponding equivalent to *it* in Romanian, learners will use either the masculine or the feminine forms of personal or possessive pronouns, according to the perceived gender of the respective nouns as they know it in L1. In ESP, *it* is all the more present as there is often reference to inanimate objects, abstract concepts, experiments, substances, animals, plants and their organs etc. So, even though this pronoun may pose difficulties for regular learners in general, it is even more important for its use to be clearly understood by ESP learners in particular. Constant reinforcement in translation activities helps considerably with negative transfer issues.

4.4. Correct terminology and equivalents

In ESP, this may be the most important aspect discussed in relation to the present topic. However, the previous points are also connected to this one, albeit in more specific senses. Using the correct words and terms is one of the main points of interest in ESP. Translation is, again, a useful exercise to practice this. Terminology can be introduced by means of translation activities or it can be revised and reinforced at the end of a lesson, again by means of translation. For example, the students may already have the necessary instruments given throughout a lesson, they have the words, they read them in a text, their mind was acquainted with them. However, when it comes to production and processing exactly how to use or group certain specialized words in order to obtain accurate sentences, this may prove more difficult and translation may elucidate the problem and help with future similar contexts. It will progressively make them think in L2 and eventually eliminate the translation process by recognizing that the first instinct of going to those equivalents that may seem similar in the two languages is not always, but rather rarely the right choice. Thus, for simple collocations such as membrană celulară or terminație nervoasă, translation practice can reinforce that, although cellular and nervous exist in English, the combinations cellular membrane and nervous ending, similar to the Romanian cellular and nervos, are incorrect, with cell membrane and nerve ending emerging as the correct choice every time. Error correction through translation activities conducive to cooperation and creativity offers a positive reinforcement with quantifiable effects on correct retention of terminology.

The emphasis on correct terminology is practiced for the reverse as well, namely the use of correct equivalents from L2 into L1. As mentioned earlier, sometimes students rush to loan words or cognates and adapt them to Romanian. For example, for *lymph nodes*, students will immediately offer the equivalent *noduli limfatici* which is incorrect given that *nodul (nodule)* is indicative of a pathological

condition, while *node* is simply an anatomical structure, part of the lymphatic system, in this case. The students need to be reminded that there are correct and appropriate terminological equivalents, and they should be encouraged to dismiss other terms even though they may appear similar. This is more difficult when the learners are beginners in their field of study as well and are not yet very familiar with the respective terminology. A simple but helpful exercise that serves its purpose without the risk of becoming boring is not to translate entire texts, but simply select certain sentences or phrases or even words from a specialized text and elicit a possible equivalent from the students. Thus, the activity is more focused on problematic issues and not exceedingly long. Here are a few examples. Sentences are selected from texts about winemaking and fruit trees for Horticulture students and equivalents are requested for certain terms. It is a good exercise both for the extraction of meaning in context and the choosing of a correct and precise equivalent:

- (1) The press wine is blended with the free run wine.
- (2) The apple tree requires a considerable period of dormancy.
- (3) Peach trees are closely related to plum trees.

Translating blended as amestecat (1) and related as relaționat (3) is not necessarily incorrect, but more appropriate terms exist for the given contexts, namely cupajat and înrudit. One word (related) is similar to Romanian and the students will immediately go to the cognate (relaționat), the other word (blended) is known to the students because of its association to the word blender, which is a familiar electrical device, so they translate amestecat. With practice, they will learn to choose the more appropriate options given above, when the context requires it. More problematic is the case of the terms free run and dormancy. While dormancy makes one think of the Romanian verb a dormi (to sleep) and this may lead the students to deduce that the meaning of this word has something to do with sleep, though they may not know the exact equivalent, free run is more difficult mainly because neither of the two words has a Romanian cognate and thus the meaning must be inferred from context, which requires knowledge about winemaking in order to logically arrive at the Romanian term ravac, which is what free run is.

4.5. Simplified phraseology

English is known for its compression capacity which facilitates the expression of ideas in fewer, more concentrated words. However, this simplification is often difficult to explain and make a routine in students' use of language, especially when L1 does not possess such features. Translation activities may point to such options to simplify a context and make it sound more authentic, especially in ESP, where such a style may be typical or desired. Here are a few examples:

L1	L2 – first option	L2 – better option
	(mimicking L1)	
Presele de balotat	Balers pack hay in a	Balers pack hay in a
împachetează fânul într-o	form that can be stored.	storable form.
formă care poate fi depozitată.		
Grâul este măcinat și	Wheat is milled and	Wheat is milled into flour.
transformat în făină.	turned into flour.	
Murena are corpul asemănător	The moray has a body	The moray has a snake-like
cu un şarpe şi nu are solzi.	like a snake and doesn't	and scaleless body.
	have scales.	

Thus, turning verbs into adjectives, using prepositions, using the *-like* combinations and appropriate suffixes are but a few examples that can simplify a sentence and make it sound more authentic, both in English and in the specialized context.

5. Conclusions

When used as a language learning technique, translation activities can prove very useful for vocabulary retention, terminology accuracy and other lexical aspects of ESP. Although some learners may find L1 to L2 translations difficult, various researchers, discussed previously in this article, have concluded in their studies that the degree of difficulty has a direct impact on retention because the more complex the effort and cognitive processes, the higher the retention degree. Thus, if properly implemented as a focused but low-pressure activity, translation practice allows learners to explore their creativity, critical thinking, and their own knowledge of the field while learning specialized vocabulary in the process.

Translation activities can help with vocabulary acquisition in ESP in multiple ways, such as introducing new terminology or reinforcing the one already taught, enriching vocabulary in general (sub-technical and non-technical terms), helping learners make correct choices by emphasizing that context matters, practicing disambiguation, distinguishing between numerous synonyms the appropriate one for the given context, understanding register and target audience and using the proper terminology according to these factors, practicing correct spelling of difficult words, or using the contrast with L1 to emphasize differences and eliminate negative transfer.

As suggestion for further research, a case study could be useful in order to process the learners' impressions regarding the usefulness of this technique specifically for vocabulary acquisition, as well as their opinions about the benefits of translation activities as detailed in this article.

References

1. Ali, S., "Integrating Translation into Task-Based Activities – A New Direction for ESL Teachers", in *Language in India*, Vol. 12, No. 8, 2012, pp. 429-440.

- 2. Atkinson, D., "The Mother tongue in the classroom: a neglected resource?", in *ELT Journal*, 41(4), 1987, pp. 241-247.
- 3. Atkinson, D., Teaching Monolingual Classes. London: Longman, 1993.
- 4. Chirobocea, O., "A Case for the Use of Translation in ESP Classes", in *Journal of Languages for Specific Purposes*, nr. 5/2018a, pp. 67-76.
- 5. Chirobocea, O., "Translation as Language Learning Technique and the Use of L1 in ESP Classes. Learners' Perceptions", in "Ovidius" University Annals, Economic Sciences Series, Volume XVIII, Issue 2/2018b, Constanta, pp. 221-227.
- 6. Chirobocea, O., "Vocabulary Acquisition in ESP. Perspectives, Strategies and Resources", in *Studii și cercetări filologice*. Seria limbi străine aplicate, nr. 17/2018c, Pitești, pp. 171-180.
- 7. Chirobocea-Tudor, O., "Useful Orthographic Patterns for the Translation of Scientific Terminology from Romanian into English", in *Studii şi cercetări filologice*. Seria limbi străine aplicate, nr. 18/2019, Pitești, pp. 128-137.
- 8. Fernández-Guerra, A. B., "The Usefulness of Translation in Foreign Language Learning: Students' Attitudes", in *International Journal of English Language & Translation Studies*, Vol. 2, Issue 1, January-March 2014, pp. 153-170.
- 9. Hummel, Kirsten M., "Translation and short-term L2 vocabulary retention: Hindrance or help?", in *Language Teaching Research* 14/2010, 61-74.
- 10. Kavaliauskienë G. and Kaminskienë, L., "Translation as a Learning Tool in English for Specific Purposes", in *Kalbotyra*, 57(3), 2007, pp. 132-139.
- 11. Kic-Drgas, J., "Translation in the ESP Teaching", in *The Journal of Teaching English for Specific and Academic Purposes*, Vol. 2, No. 2, 2014, pp. 253-261.
- 12. Mahmoud, A., "Translation and Foreign Language Reading Comprehension: A Neglected Didactic Procedure", in *English Teaching Forum*, No. 4, 2006, pp. 28-40.
- 13. Mattioli, G., "On Native Language Intrusions and Making Do With Words: Linguistically Homogenous Classrooms and Native Language Use", in *English Teaching Forum*, October, 2004, pp. 20-25.
- 14. Micic, S., "The role of translation in undergraduate medical English instruction", in *Ibérica* 16, 2008, pp. 169-182.
- 15. Mondria, J, and Wit De Boer, M., "The effects of contextual richness on the guessability and the retention of words in a foreign language", in *Applied Linguistics*.12, 1991, pp. 249-267.
- 16. Nolasco, R, L. Arthur, Large Classes. Hemel Hempstead: Phoenix ELT, 1995.
- 17. Popovic R., "The place of translation in Language Teaching", available: http://ilts.ir/Content/ilts.ir/Page/142/ContentImage/The%20place%20of%20translation%20in%20Language%20Teaching.pdf, 2001, accessed on November 30th 2020
- 18. Pouya, F., "On The Effect of Translation on Promoting Reading Comprehension in ESP", in *Journal of Basic and Applied Scientific Research*, 2(7), 2012, pp. 6495-6502.
- Ross, N.J., "Interference and intervention: using translation in the EFL classroom", in Modern English Teacher, Vol. 9/3, 2000, Pearson Education Ltd., Basingstoke, UK, available: http://web.tiscali.it/njross/interfereart.htm, accessed on November 30th 2020.