

SIMULTANEOUS DEVELOPMENT OF LANGUAGE AND COMPUTER SKILLS: AN INTERDISCIPLINARY APPROACH TO TRANSLATION

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Abstract. *English courses for technical sciences cannot be cut off from reality if they are to have meaningful, well organized and up-to-date syllabi. Such courses need to follow the trends in modern technologies and be incorporated in the curriculum in a manner that they allow students to develop an interdisciplinary or even a multi-disciplinary approach to their learning strategies, by combining knowledge and skills from different areas of study. Therefore, what is learnt from professional technical courses should be applied in an ESP course as well, giving students the opportunity to express their professional knowledge in English classes and develop their professional English language skills that they, as future experts, need to possess for successful careers in their field of expertise. Also, by empowering students with adequate language skills, an ESP course should provide a good basis to students for their future independent research and use of English in the domain of professionally-oriented language. This paper will show one such example, in which the students of Modern Computer and Communication Technologies from the College of Applied Technical Sciences in Niš, Serbia, were asked to use a new computer programme, that is a special language software for subtitles and text editing, for developing their translation skills in the domain of ESP. After a short tutorial in English on how to use this software and a list of instructions in English to follow, the students were requested to translate a five-minute long video taken from the popular cable TV show 'How it's made', found on Youtube channel, to gain new computer and language skills in this process. The technique used for this ESP class finds its theoretical background in the Joint action theory in didactics devised by Herbert Clark and the teaching/learning process as a didactic collaborative game.*

Key words: *subtitle workshop, joint action, didactic game, ESP translation*

1. INTRODUCTION

As one of the ESP constructivist theoreticians, Oleg Tarnopolsky (2012) strongly supports the concept of blended learning in ESP, which implies learning by being exposed to both traditional methods and new approaches in tuition that rely on the application of modern technological devices, that is the use of computers. Such attitude to computer-assisted learning seems to be quite justifiable taking into account the performances of students and “the perceived positive impact of computer mastery on their learning and achievement” (Warschauer et al., 2004:108). Some of these positive effects are increased motivation in students, their better results both in classes and exams

and their more permanent retention of facts and the teaching material (Warschauer et al., 2004). Of course, these are just some of the advantages that modern teaching aids like computers and the internet can bring to the ESP classroom, and that is why they are widely used nowadays and readily applied by many ESP teachers. Additional reason, no less important, is authenticity, that is “authentic, meaningful context access to vast amounts of authentic material” (Warschauer et al., 2004:8) that a computer as a medium can provide through the internet connection.

Believing in the effectiveness of the internet use in ESP tuition like Warschauer and his co-authors, Tarnopolsky also pleads for the use of the internet as a source of many valuable *authentic* English language materials that can be appropriate for ESP classroom. Such materials are essential for learning professionally-oriented English and improving language skills in specialized areas. Among hundreds of these web materials, audio-visuals stand out as indispensable tools for ESP teachers who are struggling to present and explain complex contents to their students from different fields of ESP. Their implementation in ESP classes that deal with technology and science, for instance, proves to be especially useful. This is due to the fact that audio-visuals can help both practitioners and their students to comprehend ideas, concepts, processes and products in a better way by providing them with both visual and linguistic clues that can eliminate abstraction and clarify the meaning. They can even “contextualize the learning process because they present complete communicative situations, including body language, socio-cultural and pragmatic aspects” (Talaván, 2010:288).

Bearing the concept of blended or computer-assisted learning in mind, as well as the significance of authentic audio-video materials for mastering professionally-oriented target language, translation skills in ESP classes do not always have to be practised in a traditional way. Instead of providing students with a professional text to be translated from their mother tongue into English or vice versa, which is a classic, old-fashioned manner of doing translations in class, ESP students can be asked to make subtitles for authentic audio-video web- materials that deal with professional topics, thus relying both on their knowledge of language and their knowledge of computers. In this interdisciplinary approach to translation, students can practise their language and computer skills at the same time and gain knowledge from both areas, which has a twofold benefit for them. As Talaván (2010:285) simply puts it, subtitling is an *interactive exercise* that “encourages learners to face authentic input, and produces tangible output”.

Subtitling activity in the ESP context goes hand in hand with an interdisciplinary approach to language learning. This type of education is important because it stresses that students should be able to integrate and combine knowledge from two or more different areas and apply what they know from one specific field into other fields that need not be closely related. This way, it is believed, their knowledge will become deeper, more substantial, strongly fortified, comprehensive and effective. To learn is just one part of an educational effort. What is more important than the learning activity itself seems to be the ability to use the knowledge and skills one possesses in both familiar contexts and new learning environments. In other words, what a student needs, is a chance to apply what he/she learns and gain a lot of practical experience which can drive him/her to eventually build a more complete and a more reliable repository of knowledge. Subtitling activity in ESP settings can achieve such an effect, since it presumes that students will rely on their linguistic, computer and professional skills in the process of translation; therefore, it is in line with the principle of interdisciplinarity, that is multidisciplinary.

Following the principles of constructivist blended learning approach to ESP teaching by Oleg Tarnopolsky and the principle of interdisciplinarity/multidisciplinarity, ESP classes at the College of Applied Technical Sciences in Niš are designed to be technology friendly, rooted in authentic ESP language materials, oriented towards gaining practical experience, and strongly focused on the exchange of ideas and knowledge from different courses that are studied within the study programmes.

The aim of this paper therefore, is to show how the students at the College of Applied Technical Sciences in Niš, Serbia practice and improve their translation skills with the help of computers. For that reason, a special case study in which the ESP students of Modern Computer Technologies and Communication Technologies used a software for making subtitles in their English class will be outlined and analyzed. The point is to show how interdisciplinarity can work in practice, and how students can be guided to handle their computer and language skills in the process of subtitling audio-visual materials of professional content in order to achieve tangible results and improve both their linguistic and their computer literacy.

2. CASE STUDY

In order to practise ESP translation skills, 3rd year students of Modern Computer Technologies and Communication Technologies were asked to use the *Subtitle workshop* programme so as to make subtitles for a video taken from the *How it's made* show run on Discovery channel. The computer programme was downloaded and copied on discs before the class by the teacher, and the students were expected to install the discs on their computers and run the programme themselves. As its name says, the programme is solely used for making subtitles and it has a number of features for incorporating them in the video material. The programme was a novelty to the class since the students were not using it for any other courses. The teacher's idea was to create an opportunity for students to use their computer and English language knowledge in practice in order to learn about a new computer software in English before doing the actual translation. For that reason, the students were given a list of instructions in English on how to use the programme and asked to follow certain steps in order to be able to generate their own pieces of translation. These instructions were placed on the blackboard in the form of a poster and displayed for the whole duration of the class so that references to them could be made, whenever such a need was felt. This material was adapted from the SlideShare page on <https://www.slideshare.net/lucasbertoli/tutorial-how-to-create-a-video-subtitle>, as it can be seen in Table 1.

Table 1 List of Instructions

STEP 1 - LOAD YOUR VIDEO	Choose Video ->Open to load your video.
STEP 2 - CREATE A NEW SUBTITLE FILE	Choose File -> New Subtitle to create a new subtitle.
STEP 3 - INSERT THE FIRST SUBTITLE	<ul style="list-style-type: none"> - Click button Play to play the video. Once the first dialogue started, click button Play again to pause the playback (another way to do that is clicking on the video image). - Click on the Set start time (1) button to set the starting time for the first subtitle. - Enter the content of the first subtitle in the Text Field. - Then click button Play to continue the playback. When the first dialogue ends, click button Pause again and then click on the Set end time (2) to set the final time for the first subtitle. - If the sentence is long, you can divide it in multiple lines, by hitting ENTER. - Pay attention to the synchronization of subtitles with the voice. If necessary, correct the time using the menus located above the edit text box.
STEP 4 - INSERT THE NEXT SUBTITLE	To add new subtitle, use the INSERT key on your keyboard or choose Edit ->Insert subtitle in the software menu. Then repeat the previous operations: set start time, enter the content, and set end time, until all subtitles are added.
STEP 5 - SAVE THE SUBTITLE FILE	When you finish including all subtitles you need, choose File ->Save to create an external subtitle file to your video. The most indicated format to save your file is SubRip.
STEP 6 - EMBED SUBTITLES TO THE VIDEO	To embed the subtitle file to a video, use Total Video Converter.

With the help of these instructions and a short tutorial presented by the teacher (as given in Table 2, Text1) at the beginning of the class, the students were to figure out how the programme works, how to upload the video, how to insert and edit the text, and synchronize it with the picture and the sound. These tasks were set as the target computer skills that needed to be mastered during the ESP class so that the subtitling activity could work out and be deemed successful. The students were given an additional text (Text 2 - to be found at <http://subworkshop.sourceforge.net/>) on Subtitle workshop programme taken from the official programme homepage designed for the professionals in the field. This particular text was prepared as the material for students to study at home for their homework after the class. The teacher however, not being an expert for the programme, chose to present the Text1 to the students, which was easier for the teacher to cope with.

Table 2 Tutorial

Tutorial

Text 1: Subtitle Workshop is the ultimate tool for editing subtitles. It offers support for all formats and a wide range of editing options.

The interface of this application is very similar to that of a text editor, but its options are specially designed for a subtitle editing application.

For instance, you can preview the way the movie looks like with the modified subtitle.

Subtitle Workshop has an integrated video player which allows you to open any video, on condition that you have installed the codec you need.

Besides supporting more than 60 subtitle formats, Subtitle Workshop allows you to save subtitles in a custom-user defined file format.

Timing pauses (the time gap between two subtitles) can be easily displayed and manipulated as Subtitle Workshop uses a Characters per Second system.

Whenever you want to eliminate some changes you have made to a subtitle, you can use the multi-level Undo-Redo system.

Other impressive advanced features are the smart line adjusting, the FPS conversion, search and replace, the automatic timing and text manipulation and many others.

Subtitle Workshop is recommended to anyone looking to edit their subtitles in a professional manner. This application features almost any option you could think of when it comes to subtitle editing and its compact size makes it suitable for any computer.

Taken from http://www.free-codecs.com/download/subtitle_workshop.htm,
the site for downloading codecs.

Such an approach to translation was devised by the teacher in order to introduce students to a learning environment that is closely related to the real-life experience. Although it is unlikely that the students of technical sciences will do professional translations in this particular manner after finishing their studies, since they are not trained to be translators or interpreters, but engineers, it is highly possible that they will find themselves in a situation in which they will have to be autonomous in solving complex professional tasks that are set before them. They were actually encouraged to “develop the autonomous learning strategies needed to adapt to new technologies and new situations” (Warschauer et al., 2004:86). This activity succeeded in creating a simulation of a very realistic professional situation that the students would probably encounter in their future careers. Namely, after the students complete their studies, they will have to continue studying on their own since their profession demands life-long education and a continual personal growth due to constant advancements and innovations in their area of expertise. If they wish to develop themselves professionally, the engineers to become, will have to learn about new devices, technologies, softwares, applications and programmes all the time, for

which they will often need to consult authentic texts in English about such topics. Sooner or later, they will have to deal with a new computer programme, most likely written in English, that they will have to learn how to use independently. Therefore, this activity was primarily devised to prepare students for their future professional challenges that could as well be individual research or projects, different sorts of reports or analyses, which all request a high level of professional English language skills. Therefore, the point of the class was not to deal with a familiar topic that has been studied earlier in English classes or in any technical classes that the students have, but rather to use English to learn something new about the profession. This activity performed in class thus taught students not only some useful computer skills, which are far away from what is considered to be basic computer knowledge, but also useful technical terms in English related to computer programmes. But this was just the first part of the syllabus that was planned for the realization of the class.

The second part involved the actual subtitling of the selected video material. According to Talaván (2010: 288-89), subtitling is a good pedagogical tool because it “can help students to achieve a better comprehension of the oral input, since they need to understand various communicative messages (not just the words or the grammar rules) in order to subtitle the scene“. Díaz Cintas (2008) and Williams and Thorne (2000) also spoke about the usefulness of subtitling due to the fact that it can allow for “lexical development and socio-cultural learning“ and increase the level of motivation in students. These were strong enough reasons to ask from students not to do classic translation, but rather to fully engage themselves, with all their senses and mental capacities, in developing their oral comprehension skills, mediation and general receptive skills through the subtitling assignment.

The class had 25 students and each student was asked to make subtitles for a video excerpt in total duration of five minutes. The video about *Holograms* was also downloaded before the class from the YouTube channel (<https://www.youtube.com/watch?v=XB2zXvwXqJs>) and copied on the disks for each student. The students then had to upload the video in the Subtitle workshop programme and start working on it. This particular video was selected not only because it was prepared by native speakers for native speakers, but also because it covers a professional topic that deals with hi-tech innovations. Holograms are state-of-the-art technology that students need to be aware of in order to follow the trends in their profession. Therefore, to get the students ready for the video content, the teacher led a short discussion on the topic of holograms so as to introduce them to the audio-visual material that they were supposed to subtitle.

Although the students worked individually on their own computers, making subtitles in their mother tongue, they were allowed to consult each other and cooperate with each other especially in the first part of the class when they experienced technical difficulties in using the software. Conversation in class was mainly done in English upon such occasions. In the end of the class, several subtitles were played and the class was invited to give feedback on the material that was presented. Mistakes were analyzed and suggestions were given for more adequate translations. The students also voted for the best subtitle in their opinion and were asked to make an evaluation of this particular ESP class.

Although they were experiencing difficulties at first, the students gradually made progress throughout the class, which was visible to the teacher who was closely monitoring their activities. The students had minimal teacher guidance in the beginning of the class since they were expected to be autonomous and take responsibility for their actions by

relying on their problem-solving skills. They only received the list of instructions on how to use the software and were assigned a task to complete, being provided with all the necessary assets for that activity. This kind of approach was in line with the concept of *dual immersion* that implies “learning language skills and technology skills simultaneously with the teacher providing the necessary structure and support along the way” (Warschauer et al., 2004:87).

Throughout the class, students had to rely on each other and interact a lot in order to make some important conclusions. Undoubtedly, they needed some time to learn how to use the new programme, analyze it and test it in practice, but the results were not missed. Although no straight-forward answers or clues were given to them, students were motivated and guided by their teacher to solve both linguistic and technical problems in the most optimal way. As the class was nearing the end, the teacher was more active and more intrusive to check the work of students, relying on the scaffolding technique. The last segment of the class which lasted for 1 hour and 45 minutes in total (as it can be seen in Table 3) was used for watching some of the movie clips, peer-to-peer and teacher-to-student feedback in order to comment on the mistakes that were made and make a selection of the most successful subtitles.

Table 3 Class organization

Time allotment	Activities in class
2 classes of 45 minutes plus a 15 minute break in between (1 hour and 15 min in total)	
10 minutes	Tutorial on the Subtitle Workshop programme
15 minutes	Testing of the programme and its performances
5 minutes	Discussion on the professional topic - Holograms
45 minutes	Subtitling of the video clip
20 minutes	Replay of three random subtitles, peer-to-peer feedback and correction of errors
10 minutes	Discussion on the topic after watching the video (post-viewing) and class evaluation

When asked to express their opinion on this class, the students had very positive comments. They said that the class was very interesting and enjoyable, that they liked the fact that they could cooperate during the class, that they were happy to learn about a new software and that they really liked the idea that a video clip was used in class as a teaching aid. They were overwhelmed with their achievements in class since they had concrete, real and tangible results before themselves that made their efforts worthwhile and gave them a lot of linguistic self-confidence.

All in all, this class had several aims to achieve. The primary one was to develop reading, listening, translation and communicative skills related to the professional target language that the students were taught in the framework of their ESP course, whereas the second one was to master new computer skills, which is an important added value for the students of Modern Computer and Communication Technologies. Finally, the third one was to increase the students’ awareness of the professional aspects of English for which purpose a clip from a well-known science show was used. The idea of using a popular show in class opened yet another possibility of practicing speaking skills in English in the end of the class, which was done to promote critical thinking and trigger discussion. All of these

activities had their relevance for the students' future lives and careers, that is their academic and occupational skills.

In class, the students had the opportunity to revise and reuse the language they already know and apply it in new contexts, internalize new vocabulary through the language that was presented to them both in textual and audio form, learn how to use a new software and get an insight into some professional and cultural domains of the English language. The teacher on her part had to make playing such a game possible by preparing a clear and a comprehensive tutorial on application of the Subtitle workshop software, which asked for extensive reading of the material and selection of the most important facts about this programme. Also, the teacher had to equip both the classroom and each individual student with the teaching aids needed for the realization of this class. Most importantly, the teacher had to be fully present and available to students throughout the class. She was giving both linguistic and technical support, providing an adequate amount of clues appropriate for each stage of the class progress, and thus waving a challenging learning milieu for her ESP students.

3. JOINT ACTION THEORY IN DIDACTICS AS A METHODOLOGICAL TOOL IN ESP

Some theoreticians claim that there is no difference between the methods used in ESP classes and General English classes. To them, these are all the same methods that are part of the general methodology applied in teaching English as a second language. But, whether or not this is true, it cannot be denied that certain methods seem to be more useful in the field of ESP than others. More than any other English language classes, ESP courses demand to be continually redesigned and adjusted to the student needs and the needs of the market. These changes require continual modifications of the teaching methods, techniques and principles to be used in tuition. The aforesaid could be the reason for introducing new strategies in the teaching-learning process and potential experimenting with some other educational methods in the field of ESP.

Although the Joint Action Theory in Didactics (JATD) is one of the practices used in teaching mathematics, it seems quite applicable in the teaching process of ESP, but more importantly it seems quite functional and beneficial to students who take ESP courses. The JATD was formulated by a psycholinguist, Herbert Clark, in 1996, but it is revived today and used in practice by many French scholars. The perspective of Gérard Sensevy on the JATD, for instance, is the one that is in particular effective in ESP didactics.

According to Sensevy, teaching-learning process is a collaborative game or a joint action that both the teacher and the students devote themselves to in order to achieve certain expected outcomes. In such a concept, the classroom transforms itself into a playfield where the teacher and the students make joint efforts as players in order to win the game. To play the collaborative game, as Sensevy calls it, actually means to set the rules, divide the roles and specify the tasks that need to be completed by the teacher and the students respectively. The three key stages in the development of a class that Sensevy defines as *mesogenesis*, *topogenesis* and *chronogenesis* actually imply the organization of the interactive milieu, division of the activities on the teacher-student axis and the evolution of knowledge that the teacher constantly monitors in order to modify the behavior of students if needed (Sensevy, 2010: 1648). Such a good class organization, the goals clearly set and the engagement of students who understand having their own share of responsibilities in the process of learning,

bring good results according to Sensevy, who has tested this approach in practice and gained useful insights. Therefore, it can be expected that good didactic methods from the JATD can be transferred to ESP classes, making them well-planned, meaningful, structured and hopefully quite successful.

What the JATD furthermore implies is that the teacher needs to construct common grounds on which each and every participant will share the same meanings so that all the players of the game have an identical concept of the learning environment. He/she has to lead students to a particular “state of knowledge” (Sensevy, 2010:1647). In Sensevy’s opinion, the teacher is responsible for creating a milieu to which the students will respond to and act in accordance with during the process of learning. This is of special importance in ESP classes since the concreteness of vocabulary and the specificities of the domain and genre require great precision and accuracy in the use of language. Therefore, clear and unambiguous structuring of a specialized milieu according to this didactic tool is invaluable for the ESP students who need to have firm basis upon which to build their knowledge and skills.

But these are not the only reasons why the JATD is suitable for ESP classes. In addition, the JATD approach is learner-centered and requires from students to be attentive, fully active and quite autonomous in finding solutions to complex tasks. That is why it is useful in a constructivist ESP classroom which insists on developing and improving students’ cognitive capacities, and their logical and analytical skills. Moreover, it also helps in building students’ independence in learning by trusting the teacher with the role of a coach, a supervisor and a guide. Since ESP teachers are not normally experts or professionals in the area of ESP they are teaching, they can feel more comfortable in their ESP classes by using the JATD which assigns them such roles. As Sensevy puts it - for the teacher, enacting the contract-milieu dialectic in the didactic transactions is a way of taking the uncertainty while building a relevant certainty, and enabling the students to accurately recognize the empirical facts (Sensevy, 2010:1652). In practice, the JATD states that teachers should be reticent for some time, but also be very active throughout the entire class, monitoring the activities of students constantly, correcting their mistakes and providing them with the right dosage of instructions and clues in each developmental phase of the class. This scaffolding technique they use, creates the opportunity for students to either rely on their personal resources or to collaborate with their peers, which increases their sense of independence or boosts their team spirit respectively.

In the case study that is shown in the previous chapter, it can be seen that the main goals of the syllabus were achieved with great success in the end of the class by following the JATD approach. The students learned how to use the Subtitle workshop programme and they managed to make subtitles for the video clips that were given to them, which were the two main tasks to be completed. The ESP milieu was clearly defined from the start of the class by the teacher who used adequate linguistic means, first in the form of a tutorial to introduce the students to the subtitling computer programme, and later on in the conversational approach to inform the students about the professional topic on *Holograms* that the video was discussing. Thereby, the language related both to computer programmes and the hologram technology was properly incorporated into the learning environment, making students aware of the terminology, the discourse and the genre specific for the professional areas to be covered in class. The roles of the linguistic game players were determined from the very beginning and the rules were established. Since the teacher was silent for some time after the tutorial, the students knew that they had to rely on their personal capacities in order to run the subtitling programme and get acquainted with its performances. This was part of the class where

students experienced certain amount of antagonism to the set milieu, due to various technical uncertainties that arose in the operation of the programme. But it was at the same time part of the class when the students learned a lot by making their own assumptions, by testing different possibilities and by profiting from occasional teacher interruptions that were needed to keep them on the right track and guide them to the most favorable solutions.

In the second part of the class, the students were involved in the *interlinguistic* translation, by making subtitles in their mother tongue for the video-audio material in English. On this occasion they also had to show their resourcefulness, provided the fact that they were not given any technical dictionaries to use (whether in print or on-line). This also contributed to their sense of independence and asked from them to analyze the meanings more deeply so as to infer the best possible technical translations for the unknown technical words or concepts. Here again, the teacher put the students in the center of the learning process by making them rely on the previously gained knowledge and skills of the ESP and their capacities to deal with the new contents. But also, the subtitling activity made students fully engaged in learning, which had a good effect on the retention of facts presented in the study material. That students “have established more paths for retrieval” and could “benefit from visual traces as well as from two distinct sets of verbal traces” (Danan 2004:72), by making ties between the two language systems, was more than obvious. In the final phase of the class, the results could be seen, the subtitled videos could be watched, and the errors could be corrected. Imperfections spotted by the teacher through the surveilling process could be brought to light and discussed for further improvement. The students, on their part, could express their opinions, feelings and ideas about the activities done in class, the topics that were covered and the achievements of their peers. This feedback session at the end of the class was particularly valuable for further discussion of the professional topics and for giving ideas to the teacher how to model future ESP activities. One of the ideas, for instance, could be to use real tutorials on Subtitle Workshop programme that were made by professionals for professionals in English, which is a material that can be easily accessed on the YouTube channel.

7. CONCLUSION

Subtitling of authentic video materials that deal with the professional English language is an activity that allows for interdisciplinary, that is multidisciplinary approach to learning of ESP contents. It is interdisciplinary because it implies the use of both linguistic and computer skills in the classroom which supports the concept of blended learning, but at the same time it is multidisciplinary because it asks for application and exchange of knowledge from the specialized area of profession, the area of informatics and the area of language. Organized under the principles and techniques of the JATD, such a translation activity proves to have multiple positive effects on the learners, who can, not only develop their translation skills, but also improve their reading, listening and communicative skills in ESP, accumulate new and revise the existing professional knowledge, and use computers to perform not only the basic computer operations, but also the ones far more advanced that are meant for the real computer experts. Such a language activity can pose a great challenge for students since a multimedia environment (picture, sound and text) in which the activity is performed, has the potential to engage different senses in students and eventually fasten up their cognitive operations. In this process, audio-visuals make many of the said tasks

easier, contributing to a better understanding of the complex professional English language material processed in class. Bearing in mind the success of the outlined case study, constructed upon a sound didactic foundation of the JATD, perhaps other ESP classes can be devised with the same, similar, adapted or improved features to share among ESP practitioners in view of enriching the teaching practice in ESP and exchanging valuable insights into the ESP teaching-learning processes. After all, "subtitling is a spectacular tool for helping people learn languages easily and enjoyably" (Europa, 2007:online).

REFERENCES

- Clark, Herbert. *Using Language*. Cambridge: Cambridge University Press, 1996.
- Danan, Martine. "Captioning and Subtitling: Undervalued Language Learning Strategies." *Meta* 49(1) (2004): 67-77.
- Díaz, Jorge C.. "Teaching and Learning to Subtitle in an Academic Environment". In *The Didactics of Audiovisual Translation*, edited by Jorge C. Díaz, 89-103. Amsterdam and Philadelphia: John Benjamins, 2008.
- Europa (2007). A Political Agenda for Multilingualism. Europa Rapid Press Releases. <http://europa.eu/rapid/pressReleasesAction.do?reference>
- Forcier, Richard C., and Don E. Descy. *The Computer as an Educational Tool*. New Jersey: Pearson Education, 2005.
- Kic-Drgas, Joanna. "Translation in the ESP Teaching." *Journal of Teaching English for Specific and Academic Purposes*, vol.2, no.2 (2014): 253-261. Accessed April 30, 2017.
- Sensevy, Gérard. "Outline of a Joint Action Theory in Didactics." *Proceedings of CERME 6* (2010): 1645-54. Accessed May 15, 2017.
<http://ife.ens-lyon.fr/editions/editions-electroniques/cerme6/working-group-9>
- Talaván, Noa. "Subtitling as a Task and Subtitles as Support: Pedagogical Applications." *New Insights into Audiovisual Translation and Media Accessibility* (2010): 285-99. Accessed May 15, 2017.
http://www.nuigalway.ie/sub2learn/downloads/talavn_2010_subtiling_as_a_task_and_subtitles_as_a_support.pdf
- Tarnopolsky, Oleg. *Constructivist Blended Learning Approach to Teaching English for Specific Purposes*. London: Versita, 2012. Accessed May 20, 2017.
<https://www.degruyter.com/viewbooktoc/product/205438>
- Warschauer, Mark, Shetzer, Heidi, and Christine Meloni. *Internet for English Teaching*. Washington: Unated States Department of State Office of English Language Programs, 2004.
- Williams, Helen and David Thorne. "The Value of Teletext Subtitling as a Medium for Language Learning." *System* 28(2) (2000): 217-28.