Learning CAT Tools Using eLearning Tools – A Case Study

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Abstract

The Post-Graduation Program in Translation at Universidade Autónoma de Lisboa, a private university in Portugal, is in its fifteenth edition. The program has undergone various changes, including from face-to-face to b-learning and eLearning formats. Though initially only Moodle was used, in recent years, different Virtual Learning Environments (VLE) were introduced, the first was WizIO. In the past three years, the VLE in use is Colibri - a multimedia collaborative environment developed by FCCN foundation for scientific computing) (the Portuguese to provide free videoconferencing service to Portuguese Higher Education Institutions. A social network has also been added (Facebook) to foster interaction among students and lecturers beyond the learning environment. One of the seminars taught is on Computer-Assisted Translation (CAT) tools, which implies students' learning electronic tools using other electronic (eLearning) tools. It has then been the case that software has become both a means and an end in the learning process. Given the fact that eLearning tools can represent a constraint for students in general, this so-called metalinguistic pedagogical scenario seemed to bring additional impediments to the success of the learning process. So as to analyze the impact of this setting, a survey was designed with a twofold objective. On the one hand, we aim to understand how determinant the inclusion of VLE and other eLearning resources has been in the general knowledge acquisition. On the other hand, we also assess the significance of these eLearning tools in the learning of CAT tools.

Keywords: eLearning tools, CAT tools, knowledge acquisition



Introduction

This paper aims to analyze the importance of several eLearning tools in students' general learning and in their learning of Computer-Assisted Translation (CAT) tools. This is a case study based on a survey conducted to students who attended a Post-Graduation Program in Translation held at a Portuguese university – Universidade Autónoma de Lisboa in the past five years (2012/2013 to 2015/2016).

The Post-Graduation in Translation has been in place since 2001. Initially it was only available as a face-to-face (f2f) program but, in 2006, with the introduction of Moodle, some seminars were made available in blended-learning. In 2012, a Virtual Learning Environment (VLE) - WizIQ - https://www.wiziq.com/ - was introduced and, since 2015, the program has been available and can be attended in an eLearning environment.

Using a case study, we aim to conduct an exploratory analysis so as to, firstly, understand how determinant the inclusion of a Virtual Learning Environment (VLE) and other eLearning resources has been in the general knowledge acquisition and, secondly, assess the significance of these eLearning tools in the learning of CAT tools.

A survey was sent to all the students who attended the program from 2012/2013 to 2015/2016, in a total of thirty-six. From these, sixteen (44.4%) responded and the results were analyzed quantitatively (using Surveymonkey - https://pt.surveymonkey.com/ - a cloud-based software) and qualitatively.

The paper starts with a section on literature review, which focuses on the learning process, learning regimes, eLearning tools and CAT tools; this is followed by a section on the methodology used to conduct the study, the case study itself and, finally, the analysis and discussion of our findings.

Literature review

The main focus of any educational system is to ensure successful learning, which has led to numerous theoretical approaches on how to best fulfil such process. Such theoretical contributions vary on the nature of learning and its factors, but share the common agreement that individuals learn while producing a behavioral change by means of certain stimuli to which a determined answer corresponds (Palangana, 2015). Learning theories are also unanimous in recognizing the importance of social interaction within the learning system.

The Bologna Process was agreed upon on June 19th, 1999, by twenty-nine European States with the aim to create a Common European Space for Higher Education. In this context a paradigm shift takes place, moving from a knowledge acquisition centered model to a focus on learning and skills' development.

In this way, and even though the Bologna Process was originally conceived for university degree programs only, it has, in fact, become transversal within the educational system. This results from the fact that its main objective is to create the referred common European space for higher education, safeguarding transversal competences and geographical mobility. This system has also implied the validation of more participative teaching methodologies, which place the student at the center of the learning process. This has, therefore, replaced the more traditional methodologies, with an expository nature and in which the student plays a more passive role as a recipient of knowledge facilitated by the teacher.

Not only has the role of the student been under construction throughout the Bologna Process, but also the class format / regime has been under significant changes. Today, a considerable number of universities offer complete degree programs online and the concept of virtual universities has become a common reality (Lundberg, Castillo-Merino & Dahmani, 2008). Considering today's ubiquity of Information and Communication Technology, its influence on communication and the building of knowledge is not surprising.

Blended-learning (b-learning) blends face-to-face (f2f) learning, now regarded as "traditional," and eLearning, viewed as innovative but challenging. According to Steffens & Reiss (2010), the success of b-learning methodology implies information infrastructure (backup sources to inform users); human resources infrastructure (to promote motivation and competencies of the learners); technocratic infrastructure (tools to plan and evaluate the learning performance); organizational infrastructure (networking with other institutions); cultural infrastructure (the university's teaching philosophy and adopted policies).

Studies have been developed on the impact of the learning regime on learning effectiveness and on students' different responses to eLearning, face-to-face and b-learning approaches. Generally speaking, there is a unanimous conclusion that learners prefer eLearning and f2f regimes in distinct learning contexts and with different learning purposes. The study conducted by Nenagh Kemp and Rachel Grieve (2014), on undergraduates' opinion and test performance in classroom versus online learning at an Australian university, concludes that students prefer face-to-face contact when it comes to topic discussions/activities, therefore favoring a more personalized sense of academic community. Nonetheless, students have mentioned that eLearning tasks are convenient in the sense that they allow for a more flexible time management for task completion.

The b-learning approach has, therefore, been seen as an optimal learning approach, since both lecturers and learners can conciliate the advantages of computer-mediated education and of face-to-face interaction, considering it fosters effectiveness, boosts the quality of teacher-learner interaction, and provides students and teachers with instant feedback (Fernandes Silva, Quintas & Teixeira, 2017, Gómez & Igado, 2008). More importantly, studies have shown that, rather than the sole teaching / learning regime adopted, as well as the students' past experience with it, it is the role played by the teacher as facilitator of knowledge, being partially mentor and partially allowing for learners' autonomy, that is most significant for a successful learning process (Dell, Low & Wilker, 2010).

Globalization has also demanded a higher and higher number of professionals devoted to translation, localization and interpretation, while simultaneously imposing deep changes in the referred fields, especially in terms of technology and of its relevance to the activity.

As the study by Gouadec (2007), indicates knowing translation memory (TM) systems is now a requirement in most job advertisements though not all technologies have been successfully adopted by translators. In any case, "Translators must get accustomed to using CAT tools" (Odacioglu & Kokturk, 2015, p. 15) and both professionals and future professionals must focus their training beyond the traditional linguistic and interpretative skills. Nowadays, translators and interpreters must develop instrumental skills, including technical competence in using translation tools, programs and applications that both speed and provide quality-assurance to their work.

Sikora and Walczynski (2015, p. 122) state that "developing (...) 'instrumental competence' requires, in fact, mastering skills in (...): Efficient use of CAT tools (including 'general' and 'specialized' translation technologies)," and mastering these skills will allow for professionals having a competitive advantage over those who are non-professional translators. Moreover, these technical skills have been recognized as relevant in several works on translation skills and competences, such as those by the European Committee for Standardization, by the research group PACTE 2011, among others.

Though TM systems have advantages – standardization, higher level of productivity, lower costs and higher consistency (Silva & Fernandes, 2016, p. 68) - and disadvantages – higher focus on segments and lower quality translation due to use of contaminated TMs – they are indeed crucial to translators in general and must therefore be a relevant element in the training of future professionals.

Considering the Post-Graduation's practical approach, the teaching and learning of CAT tools which will be relevant and transferrable to professional practice is line with what Kirkpatrick (1994) defines as one of the assessment stages of professional training, stage 4 - transferring knowledge to organizational contexts. The other stages are: 1-training satisfaction; 2- learning assessment; 3-transferring knowledge to work processes.

Considering the specificity of our study, we aimed to identify transference of knowledge on CAT tools acquired during the program and professional practice.

Methodology

Our work stems from a case study, conceptually conceived as an in-depth analysis, which, cannot, in reality, be applied to other contexts. (Stake, 2010; Yin, 2015). We have applied a survey, as a core technique for gathering data, in order to obtain responses to three fundamental questions:

- 1. What translation tools have you learned in this Post-graduation program?
- 2. What CAT tools do you use in your professional activity?
- 3. Which factors have influenced your learning process?

The questionnaire was built online, keeping in mind the study's objectives and our original questions, and it was emailed to students who had attended the program between 2012/2013 and 2014/2016, in a total of thirty-six.

We received 16 replies, which, as stated earlier, corresponds to 44.4% of the number of program participants in the referred five academic years. These were subjected to descriptive statistics (closed questions) (Ghiglione & Matalon, 1997; Bardin, 2009), and to category-based thematic analysis, in case of open questions (Nascimento & Menandro, 2006). Our aim was then to identify general patterns and, simultaneously, to make an in-depth analysis of such patterns, based on the discourse resulting from the open questions.

Case study

The graduate program in Translation Studies, offered by Universidade Autónoma, was launched in the academic year of 2001-2002. Since then, it has been through significant changes, always taking into account the need for acknowledging the growing significance of the role played by technology within the learning process. Consequently, Moodle (which stands for modular object-oriented dynamic learning environment) was introduced in 2006, allowing students to partake in a virtual learning environment and thus initiate an exchange of knowledge that went beyond the classroom. Later on, Skype was added as a means for students to present their final projects. Individual wikis were also an optional possibility, even though those have turned out not to be very popular amongst students.

In 2013-2014, the greatest turn-point took place, with the introduction of WizIQ - " an easy to use, mobile-ready Learning Delivery Platform to deliver live & self-paced online courses" (https://www.wiziq.com/), together with the creation of a Facebook page, where students and teachers alike began to share a space for what we could call academic and professionally-oriented socializing. The greatest change had by then been set, as live sessions (with recording possibility) were channeled by WizIQ, and Facebook made it possible for students to be constantly updated on academic initiatives, professional opportunities or even when and where a colleague and/or a lecturer would be available to discuss a project or clarify a question.

In the following academic year, 2014-2015, another step forward was taken, as we replaced WizIQ for Colibri, "a collaboration service that allows one to hold meetings remotely between two or more participants in the academic and scientific community, facilitating meetings, workgroups, classes and tutorials over the Internet. The service enables the sharing of the participants' audio, video, text, images, white board and the computer screens and includes a recording facility in order to record and play the sessions back afterwards" (https://www.fccn.pt/en/collaboration/colibri/). Colibri was developed by FCCN, which is a state agency focused on the development of computer technology and managed by the Portuguese Foundation for Science and Technology (Fundação para a Ciência e a Tecnologia - FCT). FCCN also provides support for the integration of this service with eLearning tools used by the institutions connected to RCTS (Network for Science, Technology and Society).

Colibri has been kept for three consecutive academic years, together with the university's Moodle platform and the program's Facebook page. Live sessions are recorded and students are all given access to the recordings whether they have been able to attend classes face-to-face or online, or not at all. This means that information is kept and accessible to all, as time and space boundaries cease to exist.

Since 2006, the Post-Graduation in Translation at Autónoma has included the learning of CAT tools in its study plan. Initially, students would have to do this course face-to-face and the tools taught were Wordfast (http://www.wordfast.com/), more precisely, Wordfast Classic – which operates inside of MS Word -, Catscradle - web page editor for professional freelance language translators developed by Stormdance (https://www.stormdance.net/software/catscradle/overview.htm) – and Trados (http://www.sdltrados.com/products/trados-studio/) – the leading computer-assisted translation software suite.

Gradually, as with other courses, students were able to do this course in b-learning and in eLearning. Yet, commonly students prefer to attend most sessions face-to-face, which has led us to consider that CAT tools may pose a special challenge to students if doing the course online.

Today, Wordfast is still part of the course, though the professional version – Wordfast Pro 4 – and the cloud version – Wordfast Anywhere; and Trados is still included – Trados Studio 2015. But new software has been added – MemoQ (https://www.memoq.com/en/) and Memsource (https://www.memsource.com/). MemoQ is an upcoming translation tool created by Kilgray and Memsource is a cloud-based translation management system.

So as to allow students the time to learn about and practice using these tools, the course on Translation Tools spreads throughout the two semesters of the program and students are able to use Trados, MemoQ and Memsource for several months or even a year, as the university has an agreement with the companies owning the software. In regards to Wordfast, the software offers a demo version that allows students to use it for unlimited time though with limited (but rather high) number of segments.

Findings and discussions

Our survey included closed and open questions, which were subject to different analyses: closed questions were analyzed based on a descriptive analysis provided by the software (Surveymonkey) and a category-based content analysis was conducted of the open questions. One of the conclusions to be drawn from our case study is the gradual change in the way academic population perceives and conceives knowledge transmission and knowledge acquisition. We can observe a growing confidence, in both students and lecturers, in their performance within new learning environments.

Observing our survey results, we can conclude that there is a balanced distribution between the number of students who have opted for a face-to-face regime (37.5%) and those who have chosen an eLearning possibility (37.5%), leaving 25% of the student population opting for a b-learning environment (Figure 1).



Figure 1: Different attendance regimes

The leading percentages, as far as eLearning tools are concerned, go for Moodle and Colibri, followed by Facebook, WizIQ and Wikis, which leads us to conclude that the changes implemented in the last two academic years have, indeed, proven to be more efficient within the learning process and more appreciated by the student population. These results are evidenced in Figure 2.





A significant part of our student population, 93.3 %, stressed the importance of pedagogical relationships which have been established with both peers and professors. This backs up the fact that the introduction of more complex eLearning environments has contributed to the strengthening of human relations and communication within the learning process. We must nevertheless point out that the low number of students attending the program each year does foster a close relation among participants and between participants and lecturers.

As made evident in Figure 3, almost two-thirds (73.3%) of the students who have answered our survey have considered that these teaching methodologies were very important and a significant 66.7% of participants have pointed out eLearning tools as very important, also.



As far as CAT tools are concerned, students have pointed out Trados, Wordfast Anywhere and Wordfast Classic as the leading tools newly learned (Figure 4). As you may see in Figure 5, Trados and Wordfast have also been referred as the CAT tools most used currently by those students who are professionally engaged in translation (40% of the participants).



Figure 4: CAT tools used in the Program



Figure 5: CAT tools used in professional life

It is also important to point out that the highest number of participants in our survey has answered that the Post-graduation Program in Translation Studies has either been determinant in their professional careers (10 out of 16 answers) and/or very helpful in establishing a professional network (13 out of 16 answers).

As evidenced in Figure 5, the learning of CAT tools during the program is deemed transferrable to professional practice – one of the stages of training assessment referred to by Kirkpatrick in 1994, in this case, the impact of training in professional life.

The main conclusions, therefore, to be drawn are that eLearning tools have contributed to strengthening the team spirit between students and students and professors, as well. We can also infer from our study's preliminary results that there has been a balanced appreciation of both f2f and eLearning possibilities by students, which then leads us to conclude that f2f learning environments are not set to fade away, but have rather been enriched by eLearning additional possibilities.



Figure 6: Professional activity

Learning CAT tools through eLearning methodologies has also proven to be a successful venture, as students have shown a positive response to this interchange between the roles of subject and object of study subsequently taken by technology.

In terms of the category-based content analysis conducted of the open questions of the survey (Nascimento & Menandro, 2006), the following categories were identified: (e-)Learning tools; learning regime and learning CAT tools; and Post-Graduation and professional practice.

In regards to the first category - (e-)Learning tools – two aspects are deemed relevant by the respondents: the fact that these tools allow to store information (Moodle) and to record classes, and that the recording is later made available (WizIQ and Colibri). We may consider that students/respondents value "frozen information" – information that is kept as is and made available for study and download. An example of this is the answers given by Respondent 5, "Moodle para partilha de informação, WizIQ para os vídeos e o Facebook para agendamentos" ("Moodle to share information, WizIQ for the videos and Facebook for scheduling (classes, meetings, for example") and by Respondent 4 "Considero o Colibri importante porque é uma possibilidade de ter acesso à aula mesmo para quem não tenha podido assistir" (I consider Colibri because it allows us to access the class even if we were not able to attend the class").

Respondent 5 mentions another tool – Facebook – which students consider important and some criticism is made to Colibri in technical terms – Respondent 8 states that "Colibri e Moodle embora embora o funcionamento do Colibri não tenha sido dos melhores (demasiado tempo para carregar, extremamente complicado manter uma ligação em direto, interrupções, etc.)" ("Colibri and Moodle though Colibri did not work very well (took too long to start, it was difficult to keep the connection, there were interruptions, etc.).

In the second category - learning regime and learning CAT tools - the core idea of most statements is the link between f2f learning-practical approach-pedagogical relations. Most statements by respondents state that this link is highly relevant: Respondent 6, for example, says that the relationship with students and lecturers was crucial to the learning process and that, more importantly than acquiring knowledge, she found mentors ("A relação com os Professores e colegas foi fundamental para o progresso e aprendizagem. Mais do que conteúdos, ganhei mentores") and Respondent 8 stated that f2f classes are much better than online ones and that she never again used some of the CAT tools she had learned during the program ("Acho que aulas presenciais são sempre melhores. Via videoconferência é sempre mais difícil, pelo que houve algumas ferramentas que nem lhes toquei mais após a pósgraduação"). There was also mention of the importance of recorded classes for reviewing ("Facilidade em explicar a utilização da ferramenta e possibilidade de rever a gravação da aula ajudaram na aprendizagem" – Respondent 5) and to the advantage of attending classes online - the lack of noise allows for more quickly doing the exercises and this respondent (Respondent 16) affirmed having had no difficulty asking questions if any doubt arose even if he or she was not in class ("À distância tive mais tranquilidade para fazer os exercícios durante as aulas. Não tive nenhum problema em colocar dúvidas mesmo não estando presencialmente").

Finally, in the third category - Post-Graduation and professional practice – among those who are translators today (not all respondents are), the most relevant seems to be that the Post-Graduation in Program allowed them to acquire technical knowledge, to further their professional and personal knowledge and to widen their networking. Respondent 10 said the program was the basis for his/her professional development ("Praticamente para mim significou tudo, foi a base do meu desenvolvimento profissional."), Respondent 4 emphasized the personal connections and the role of Facebook in keeping in touch with former classmates and as a tool for advertising job offers ("Aprendi bastante com a pós-graduação e aprofundei também outros conhecimentos. No que respeita às relações estabelecidas, parece-me que o Facebook é uma ferramenta fantástica para manter os contactos e partilhar ofertas de emprego.") and Respondent 7 summarized by saying the program was important both for acquiring technical knowledge and for personal development ("Na altura foi muito importante, tanto para o conhecimento pessoal como para o aperfeiçoamento técnico.")

Conclusions

This study aimed to assess the influence of VLE and other eLearning resources on students' knowledge acquisition and on their learning of CAT tools.

Based on the results of the study and our analysis of both open and closed questions, we may conclude that students considered f2f learning, the relationship established with teachers and students and the practical approach of the program the most influential elements in their learning process. Additionally, eLearning tools and participating methodologies also contributed to their successful learning.

Among the eLearning tools used, students emphasized the role of Moodle and Colibri, since Moodle allowed them to store and retrieve information and Colibri allowed the recording and viewing of sessions with no time restrictions.

In terms of the CAT tools taught, Trados and Wordfast are those most frequently used by former students who are nowadays still professionally engaged in translation, as well as the tools which have been transversal to different editions. Even though most students opted for attending the seminar on CAT tools f2f, there are no statements by those attending it online and experiencing difficulties. We can, thus, conclude that learning CAT tools using eLearning tools may be more challenging but it is nevertheless achievable.

References

Bardin, L. (2009). Análise de conteúdo. Lisboa: Edições 70.

Dell, Cindy Ann, Low, Christy, & Wilker, Jeanine F. (2010). Comparing Student Achievement in Online and Face-to-Face Class Formats. *MERLOT Journal of online Learning and Teaching*, 6 (1), 30-42.

Ghiglione, R., & Matalon, B. (1997). *O Inquérito – Teoria e Prática* (3rd ed.). Oeiras: Celta Editora.

Gómez, J. & Igado, M. (2008). Blended Learning: The Key to Success in a Training Company. *International Journal of Instructional Technology and Distance Learning*, 5(8), 33-42.

Gouadec, D. (2007). *Translation as a Profession*. (2nd ed.). Amsterdam/Philadelphia: Benjamins.

Kemp N., & Grieve, R. (2014). Face-to-face or face-to-screen? Undergraduates' opinions and test performance in classroom vs. online learning. *Frontiers of Psychology*. 5, 1-11.

Kirkpatrick, D. L. (1994). *Evaluating Training Programs: The Four Levels*. San Francisco, CA: Berrett-Koehler.

Lundberg, Castillo-Merino, & Dahmani (2008). Do Online Students Perform Better than Face-to-face Students? Reflections and a Short Review of some Empirical Findings. *Revista de Universidad y Sociedad del Conocimiento*, 5, (1), 35-44.

Nascimento, A., & Menandro, P. (2006). Lexical Analysis and Content Analysis: A Proposal for Conjugate. *Estudos e Pesquisas em Psicologia*, 6 (2), 72-88.

Odacioglu, M., & Kokturk, S. (2015). From Interdisciplinarity to Transdisciplinarity in Translation Studies in the Context of Technological Tools & Localization Industry. *International Journal of Comparative Literature & Translation Studies*, 3 (3), 14-19.

Palangana I. (2015). *Desenvolvimento e Aprendizagem em Piaget e Vigotski. A relevância do social*. Summus editorial: São Paulo, Brazil.

Quintas, C., Silva, I. F., & Teixeira, A. (2017). Assessing an eLearning and b-Learning Model-A Study of Perceived Satisfaction. *International Journal of Information and Education Technology*, 7 (4), 265-268.

Sikora, I., & Walczynski, M. (October 2014). Incorporating CAT tools and ICT in the translation and interpreting training at the undergraduate level. In L. Grabowski & T. Piotrowski (Eds.), *The Translator and the Computer 2* (pp. 119-133). Wroclaw: Philological School of Higher Education.

Silva, R., & Fernandes, L. (2016). Avaliação comparativa de ferramentas web de Apoio à tradução através de critérios de usabilidade e ergonomia cognitiva. *Tradução em Revista*, 21, 67-90.

Stake, R. E. (2010). *Qualitative Research: Studying How Things Work*. New York, NY: Guilford Press.

Steffens, D., & Reiss, M. (2010). Performance of Blended Learning in University Teaching: Determinants and Challenges. *E-learning and Education*, 56, 1-18.

Yin, R. K. (2014). Case Study Research: Design and Methods. Los Angeles: Sage.

Catscradle https://www.stormdance.net/software/catscradle/overview.htm

Colibri https://www.fccn.pt/en/collaboration/colibri/

Memsource https://www.memsource.com/

MemoQ https://www.memoq.com/en/

Surveymonkey https://pt.surveymonkey.com/

PACTE http://grupsderecerca.uab.cat/pacte/en

WizIQ https://www.wiziq.com/

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