






Didactic audiovisual translation in language teaching: Results from TRADILEX

Traducción audiovisual didáctica en enseñanza de lenguas: Resultados del proyecto TRADILEX

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ABSTRACT

The current paper reports on the results of a national research project investigating the use of didactic audiovisual translation (DAT) in foreign language teaching. Although previous research in this field concludes that there are positive outcomes in students' learning, most studies rely on small samples and analyse one language skill only. The TRADILEX project aims at examining the effect of several modes of audiovisual translation (AVT) -i.e., subtitling, dubbing, subtitling for the deaf and hard of hearing, audio description and voiceover- in oral and written skills of university students learning English as a foreign language. This article assesses the effectiveness of a didactic proposal that includes 30 lesson plans through an intervention carried out with 566 participants from eight universities in Spain. The study relies on a quantitative design, and statistical tests (descriptive statistics and Wilcoxon Test) were carried out to estimate the effect of DAT on oral and written reception and oral and written production of the students. Our results underline that there are statistically significant differences that confirm students improved in the four communicative skills in the foreign language. Besides, there is a positive evolution in students' achievement during the study, and participants report a favourable perception of the didactic intervention.

RESUMEN

Este trabajo presenta los resultados de un proyecto nacional sobre el uso de la traducción audiovisual didáctica (TAD) en el aprendizaje de lenguas extranjeras. Si bien los resultados de investigaciones previas en este campo son favorables con respecto al desempeño académico del alumnado, la mayoría de los estudios analizan una única destreza lingüística y cuentan con muestras reducidas. El proyecto TRADILEX tiene como objetivo analizar el efecto del uso de diferentes modalidades de traducción audiovisual (TAV) (subtitulado, doblaje, subtitulado para sordos, audiodescripción y voces superpuestas) en las competencias orales y escritas del alumnado universitario que estudia inglés como lengua extranjera. El presente artículo analiza la efectividad de una propuesta didáctica que incluye 30 planes de estudio y que se analizó a través de una intervención con 566 participantes de ocho universidades españolas. La investigación toma un diseño cuantitativo en el que se realizaron pruebas estadísticas (estadísticos descriptivos y Test de Wilcoxon) para valorar el efecto de la TAD sobre las destrezas lingüísticas de recepción oral y escrita, producción oral y escrita del alumnado. Los resultados subrayan que hay diferencias estadísticamente significativas que demuestran que los participantes del estudio mejoran en las cuatro destrezas comunicativas analizadas. Además, los datos también confirman la evaluación positiva del rendimiento del alumnado en el transcurso del estudio, así como una percepción favorable de la intervención didáctica por parte de los participantes.

KEYWORDS | PALABRAS CLAVE

Didactic translation, audiovisual translation, language teaching, language didactics, foreign language, digital literacy. Traducción didáctica, traducción audiovisual, enseñanza de lenguas, didáctica de la lengua, lengua extranjera, alfabetización digital.

1. Introduction and state of the art

Since the 1980s, audiovisual media has been widely used as a language teaching resource (Geddes & Sturtridge, 1982; Sherman, 2003; Stemplesky & Aracario, 1990; Tomalin, 1986). Its use in the language classroom has garnered learning benefits for students who can work with authentic language in class and interact in communicative situations (Buck, 2010; Ghia & Pavesi, 2016; Izquierdo et al., 2017; Navarro-Pablo et al., 2019; Pavesi, 2015). Technical progress has informed evolution in the way in which we currently use technology in the classroom, where student-centred approaches require students to play active roles in the use of Information and Communication Technology (ICT) (Motternan, 2013). Against this background and dating back a number of decades, audiovisual translation (AVT) began to be used as a resource in foreign language classes specifically by using subtitling as a support element (Duff, 1989; Holobow et al., 1984; Maley & Duff, 1983; Price, 1983; Vanderplank, 1988). The proactive role of students in the subtitling and dubbing of videos has more recently demonstrated that a beneficial effect on language learning can be appreciated and has generated increasing interest in didactic audiovisual translation (DAT) (Wang & Díaz-Cintas, 2022; Zabalbeascoa et al., 2012).

DAT specifically refers to the use of modes of translation like subtitling, dubbing, subtitling for the deaf and hard of hearing (SDHH), audio description (AD) or voiceover as pedagogical resources in language didactics (Talaván, 2020). In other words, DAT is focused on the design, development and application of didactic tasks where students are required to subtitle or dub a video clip using distinctive strategies and make use of the available technology (which includes different applications and software, such as Aegisub). The research regarding DAT possibilities in language learning is an interdisciplinary area in which applied linguistics, language and literature didactics, translation studies and educational science all converge (Lertola, 2021). In addition to offering promising results related to the development of the communicative skills of primary, secondary and university education students (Ávila-Cabrera & Rodríguez-Arancón, 2021; Bausells-Espín, 2022; Beltramello & Nicora, 2021; Bolaños-García-Escribano & Navarrete, 2022; Incalcaterra-McLoughlin, 2019; Marzà et al., 2022; Pintado-Gutiérrez & Torralba, 2022; Soler-Pardo, 2020), DAT likewise has obvious implications in terms of digital literacy, given that subtitling or active dubbing of videos by students facilitates working on their digital skills, multimodal working or mediation, amongst others (Martínez-Sierra, 2021). Furthermore, it is of importance to recognise that DAT can be used in face-to-face or digital educational environments, which is of special interest given the prominence that non face-to-face and hybrid modes of language learning have been afforded as a result of the COVID-19 pandemic.

For two decades, research in this field has provided empirical evidence that shows that the use of DAT facilitates the acquisition of vocabulary (Lertola, 2019), the promotion of intercultural skills (Borghetti & Lertola, 2014), the improvement of oral comprehension (Ávila-Cabrera, 2022; Navarrete, 2020; Sánchez-Requena, 2018) and also the advancement of written skills (Ibáñez-Moreno & Escobar, 2021). Linguistic advantages aside, it has been observed that the use of the DAT leads to an improvement in other fundamental elements in education, such as creativity (Ávila-Cabrera, 2022), the fostering of interaction in the classroom and motivation (Alonso-Pérez, 2019), the activation of previously-acquired knowledge, working with higher and lower order cognitive abilities, or translanguaging -the use of both the mother tongue and the foreign language in the classroom- (Baños-Piñero et al., 2021). Recently, research results have underlined the benefits of working with integrated skills (Sánchez-Requena et al., 2022) and confirm the pedagogical possibilities of DAT in new environments, such as in speech therapy (Fernández-Costales et al., 2023). Until now, most research has focused on analysing the results of case studies with small samples carried out in a single institution and research with inferential statistics or analysis using large samples collated in different contexts is infrequent. In addition, previous studies predominantly look into a single aspect: the improvement in students' written skills (Ibáñez-Moreno & Escobar, 2021), the impact on vocabulary acquisition (Elshehry, 2021) and the effect of DAT on motivation (Beseghi, 2021). However, the effect on different dimensions in language learning has not been comprehensively investigated. Against this background, the TRADILEX project (<https://tradi.uned.es/proyecto-tradilex/>) worked on the principle that it was necessary to research the application of DAT from a broader perspective and by using a robust research design, with a considerable sample size made up of participants from diverse national locations.

The sample consists of 566 participants from eight Spanish universities enrolled in the 2021-2022 academic year. The general objective of the project was twofold: on the one hand, to evaluate the impact of DAT on the four linguistic skills of the participants and, on the other, to assess the learning progress from the first to final lesson plans (LP) carried out. In order to estimate the effect of DAT on the L2 learning process, 30 LPs were designed for the B1 and B2 levels from the Common European Framework of Reference for Languages -or CEFR- (Council of Europe, 2018) in which the participants worked with the five AVT modes: subtitling, SDHH, dubbing, AD and voiceover. With that in mind, the specific objectives of this article are formulated as follows:

- 1) Analyse the impact of DAT on oral production.
- 2) Analyse the impact of DAT on written production.
- 3) Analyse the impact of DAT on oral reception.
- 4) Analyse the impact of DAT on written reception.
- 5) Evaluate the progress of L2 skills and knowledge of AVT throughout the didactic intervention.
- 6) Evaluate the participants' perception during the didactic intervention.

There are several reasons why we believe that this piece of research can contribute to educational improvement in language learning. Firstly, empirical evidence confirms the effectiveness of DAT as a pedagogical resource in the teaching of languages in different linguistic settings. Secondly, the academic progress of students who integrate this didactic resource into their learning itinerary has been verified. Thirdly, timely educational implications of a didactic proposal that goes beyond improving linguistic competence are established, given that it promotes digital literacy, multimodal learning and the use of new technologies in the classroom. Finally, the results presented here are the result of an interdisciplinary research project in which researchers from philology, language didactics, and pedagogy have participated, all of whom can contribute to new interdisciplinary perspectives to the language teaching process.

2. Methods and materials

The study has a pre-experimental mixed research design and is placed within a national R+D+I project developed between 2020 and 2023. It is essential to have a general understanding of the project in order to become "au fait" with the methodology used in this study. Figure 1 shows the timing of the project which revolves around 9 phases:

- Launch (O1). This first phase took place in the first term and consisted of the creation of the research group, the building of the website and the carrying out of a bibliographical review.
- Proposal design (O2). During the second term, the methodological proposal and the general research framework were designed. The modern language centres where the investigation would be implemented were also selected.
- Task design and centre network (O3). In the third term of the first year, 30 LPs were designed for B1 and B2 levels and a collaborative network was established with the language centres involved in the project.
- Pre-experimental study (O4) and its continuation (O5). In the first term of the second year, specific training was given to the participating teachers so they could rigorously carry out the project implementation. Additionally, studies began within the different language centres and the pilot data were collected. This phase continued during the second term of the second year through the investigation presented here, with constant monitoring by the research team.
- Study closure (O6). In the third term of the second year, the study in language centres was closed and data analysis began.
- Platform design and other languages (O7). In this seventh phase, the virtual platform was developed to host the 30 LPs for use by both students and teachers.
- Implementation (O8). The digitalisation of the LPs in the new platform format was the eighth phase. In addition, a manual of good practices in DAT was finalised.
- Piloting, transfer and dissemination (O9). In this final phase, platform pilot tests were carried out with some institutions, transfer possibilities to other contexts were analysed and an international conference on DAT was held.

The main objective of this research is to analyse the data obtained in the phases associated with the pre-experimental study (O4 and O5). Temporarily, these phases took place in the final term of 2021 and the first term of 2022. This is of particular interest as the terms coincided with the SARS-CoV-2 pandemic. This situation resulted in the intervention being carried out completely online in a Moodle, where virtual courses were created for each level and centre.

Figure 1. General project timeline

	1 st YEAR			2 nd YEAR			3 rd YEAR		
	1 st Term	2 nd Term	3 rd Term	4 th Term	5 th Term	6 th Term	7 th Term	8 th Term	9 th Term
01. Project launch	✓								
02. Design proposal		✓							
03. Task design and centre network			✓						
04. Quasi-experimental study				✓					
05. Project continuation					✓				
06. Study closure						✓			
07. Platform design and other L2							✓		
08. Manual and platform implementation								✓	
09. Pilot stage, transference and dissemination									✓

The process which was followed was identical for each institution where each institution was provided with a file containing the instructions the students would need to complete their course registration in the virtual learning space. Each corresponding centre boasted not only teaching staff but also the supervision of an individual belonging to the research group, whose main function was to supervise and ensure the correct development of the intervention. There were weekly follow-up sessions and the course forums and email were used as the main means of communication. The courses had the following structure:

- Course presentation and initial tasks. This section provided a general guide in PDF and interactive support with the main steps to follow, alongside access to the pre-test and the initial questionnaire.
- Lesson plans. Subsequently, five blocks with the different DAT modes were offered, each with an introductory guide and interactive support with the initial steps to follow and guidelines for the corresponding DAT mode, software tutorials, etc. The first block contained 3 subtitled LPs, the second had 3 voiceover LPs, the third included 3 dubbing LPs, the fourth consisted of 3 audio description (AD) LPs, and in the fifth block there were 3 SDHH LPs. Within each modality, the level of difficulty was incremental, as is the case in the full set of DAT modes. With this strategy, sequential learning is anticipated which favours the learning process and reduces the dropout rate.
- Final tasks. At the end of the intervention, the students had to complete a final questionnaire and do an integrated skills test to verify their progress.

The instruments used for data collection were the following:

- Initial questionnaire. An 11-item questionnaire (largely closed-ended questions) that collated data of interest on the sample. The questionnaire contained a block for sociodemographic data, self-perception of communicative competence levels in L2 and previous DAT experience. The questionnaire also explored the sample's expectations regarding the course.

- Initial Test of Integrated Skills (ITIS). This test evaluated the four basic macro-skills and measured the students' performance before starting the intervention (Couto-Cantero et al., 2021).
- Intervention. The intervention was evaluated through rubrics designed for each modality. On a weekly basis, the students received information about their delivered tasks, therefore allowing for reflection on their strengths and areas for improvement.

Regarding the intervention, Figure 2 (<https://doi.org/10.6084/m9.figshare.23123426>) shows a combination of the LPs that were designed and those that were used for each didactic sequence: the sequences of 6 LPs for a single modality and the sequences of 15 LPs for 5 combined modes. Although not all the LPs were used in the intervention analysed here, specific courses were indeed implemented in which short sequences of a single modality were worked on. This occurred specifically during the piloting carried out in the O4 phase (González-Vera, 2022). After piloting, necessary corrections and improvements were implemented in the design of the intervention, in the virtual platform and in some LPs.

The LPs were built around an excerpt from a short film which had previously been selected in order to achieve specific educational objectives. The estimated time that each participant had to dedicate to undertaking each LP was 60 minutes, in which the tasks were divided into four blocks: warm-up tasks, video watching, DAT tasks and consolidation tasks (post-DAT tasks).

- Final Test of Integrated Skills (FITIS). This post-test was identical to that of the pre-test and its main objective was to quantitatively measure the degree of development of each macro-skill after the intervention, in order to be able to compare this information with that of the pre-test. This allows one to have a quantitative vision of student progress and, at the same time, is a core element for the research project.
- Final questionnaire. A 21-item questionnaire (largely closed-ended questions) aimed at assessing students' perception of the experience. The questionnaire was built around four blocks: process perceptions, perceptions of the results obtained, perceptions of the impact of the intervention on motivation and the development of interculturality and levels of general satisfaction with the project.

The sample is made up of N=566 participants from different Spanish universities: The National University of Distance Education, the European University of Madrid, the University of Castilla-La Mancha, the University of Almería, the University of Córdoba, the University of A Coruña, Jaume I University and the University of Lleida. Figure 3 (<https://doi.org/10.6084/m9.figshare.22259278>) illustrates the gender distribution according to each centre. The majority are women (60.78%), with men representing 38.64% of the sample and non-binary 0.88%.

Regarding the age of the participants, the data have been grouped into four ranges. From 18 to 30 years old (A), from 31 to 40 years old (B), from 41 to 50 years old (C) and 51 or more years old (D). Figure 4 (<https://doi.org/10.6084/m9.figshare.23139083>) illustrates the distribution of the sample by age and gender, and from it, one can appreciate that most of the participants belonged to group A (N=300, 53.01%), while range B accommodated 18.37% (N=104), and range C 16.6% (N=94). The least represented range is D with 12.02% (N=68).

The sample includes participants from both state and private universities, and from face-to-face and distance education institutions. There is also a balance in both the age and gender of the participants. To address the code of ethics under which the project operated, on July 5th 2021, a certificate of suitability was obtained. This certificate allows for the involvement of human beings as part of a research project. In order to guarantee anonymity when working with collated data, each participant was issued a code concealing their identification.

3. Results and analysis

In this section, a quantitative and inferential analysis is explored. Firstly, a study of the normality of the oral and written production variables and of the oral and written reception is carried out, the results of which have been obtained through the pre-test (ITIS) and post-test (FITIS). Additionally, each variable is studied separately through different statistics. Participant performance is also analysed via the grades obtained in each DAT task.

3.1. Descriptive statistics analysis and sample normality study

Table 1 (<https://doi.org/10.6084/m9.figshare.23138678>) summarises the basic descriptive statistics. Valid indicators for each of the variables are collected and missing indicators are shown. With regards to the post-test, the increase in lost data can be attributed to the dropout rate. It is important to appreciate that the course was implemented electronically during a complex and unprecedented socio-health situation. The oral reception success rate stood at 41.62%; written reception at 43.18%; oral production at 49.45%; and written production at 47.48%. Considering that universities such as the National University of Distance Education usually achieve a follow-up success rate of less than 40%, course engagement can be deemed to be high. Within the realms of Distance Learning (DL) (García-Aretio, 2017), the success rate is calculated by the number of students who complete all available course tasks, including the evaluation tasks.

Concerning the normality study, the H_0 states that each variable is normal. However, a normality analysis (Shapiro-Wilk) of the sample of each of the variables listed in Table 1 reveals that the p-indicator is $<.001$. This indicates that the previously presented hypothesis must be rejected and the alternative hypothesis must be accepted, which shows that the variables in Table 1 do not meet the normality conditions.

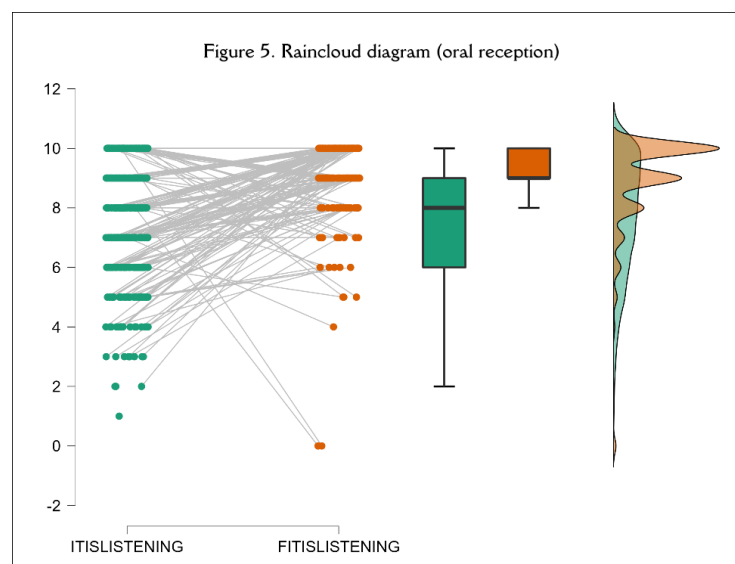
3.2. Inferential analysis

To execute the inferential analysis, it is essential to consider both the sample size and the normality analysis. When dealing with variables that do not meet the normality conditions, non-parametric tests must be used. In this case, the analysis of the impact of the intervention was conducted through average comparisons, using the Wilcoxon test for paired samples. The analysis is divided into four sections, each of which corresponds to each of the basic language skills.

3.2.1. Oral reception

To study the difference in averages in this variable, an alternative hypothesis is proposed. This hypothesis puts forward that the oral reception value in the pre-test is lower than the value of oral reception in the post-test. To arrive at this hypothesis, the Wilcoxon paired sign test was implemented, obtaining the values detailed in Table 2 (<https://doi.org/10.6084/m9.figshare.23139518>).

The p-value of the Wilcoxon test is statistically significant, entailing the rejection of the null hypothesis and the acceptance of the alternative hypothesis. Therefore, one can assert that the difference in the averages is statistically significant, and the value of the FITIS oral reception is significantly higher than that of the ITIS oral reception, where there is a percentage increase of 16.43%.

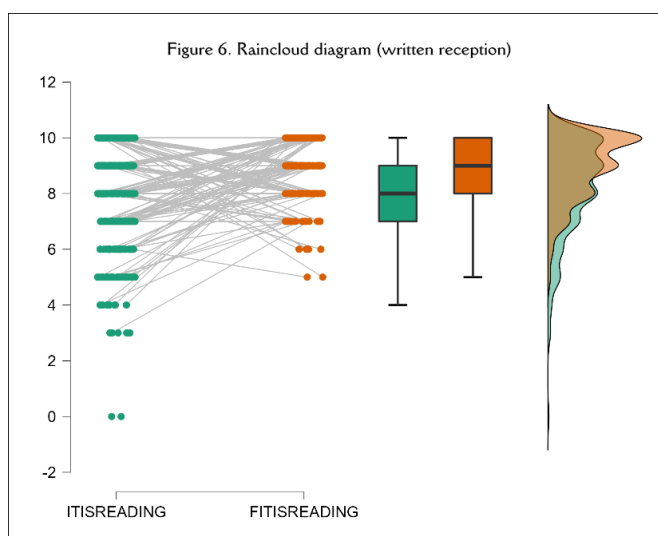


The raincloud diagram in Figure 5 corresponds to the variable in question. In this figure, oral reception is shown with green illustrating the distribution of measure 1 (ITIS) and orange the distribution of measure 2 (FITIS). Latest trends in Statistics and Data Science informed the use of this type of diagram as the raincloud diagram is most advantageous in that it is a representation system that is both precise and transparent, reflects the raw data, the probability density and key elements such as the mean and median in a visual and clear way (Allen et al., 2021).

Perhaps one of the most interesting aspects to highlight is the homogenizing and beneficial effect of the intervention with regards to this variable, given that the mean score increases at the same time as the standard deviation decreases, as shown in Table 3 (<https://doi.org/10.6084/m9.figshare.23139707>). Delving into the standard deviation, it is important to clarify that this homogenizing effect is reflected in a percentage reduction, since the standard deviation of the FITIS (oral reception) falls by 21.08%.

3.2.2. Written reception

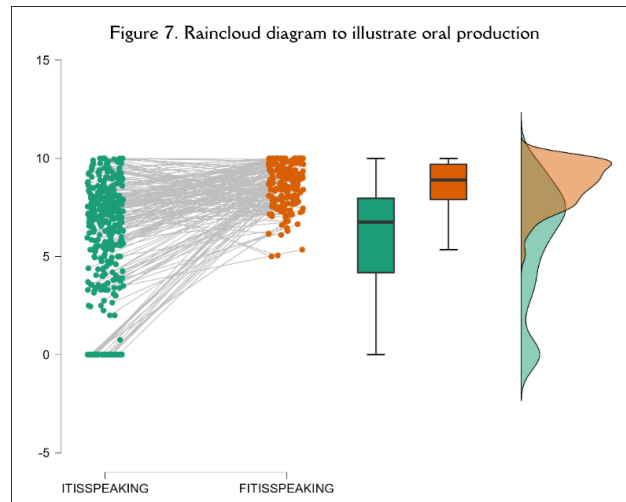
The analysis of this variable proceeds in a similar vein to that of the oral reception variable. Firstly, the non-parametric test is applied, enabling the study of the alternative hypothesis that asserts that the written reception score in the post-test (FITIS) is higher than that of the pre-test (ITIS), obtaining the results shown in Table 4 (<https://doi.org/10.6084/m9.figshare.23139893>). Based on the results obtained, the null hypothesis must be rejected and the alternative hypothesis accepted since the p-value is less than .05. As previously mentioned, the representation of the written reception data has been chosen using raincloud diagrams (Figure 6) in order to offer a more complete vision of the data set.



The raincloud diagram depicting the written reception results shows an effect not dissimilar to that of the oral reception variable, albeit in this case the difference is less pronounced. Inspection of Table 5 (<https://doi.org/10.6084/m9.figshare.23145800>) reveals that this is because the difference between the average and the standard deviation is smoother and, furthermore, the distribution is different. However, the homogenizing effect of the intervention continues to be appreciated, meaning that students improve in a harmonious manner. In percentage terms, the reduction in the standard deviation is 33.39%.

3.2.3. Oral production

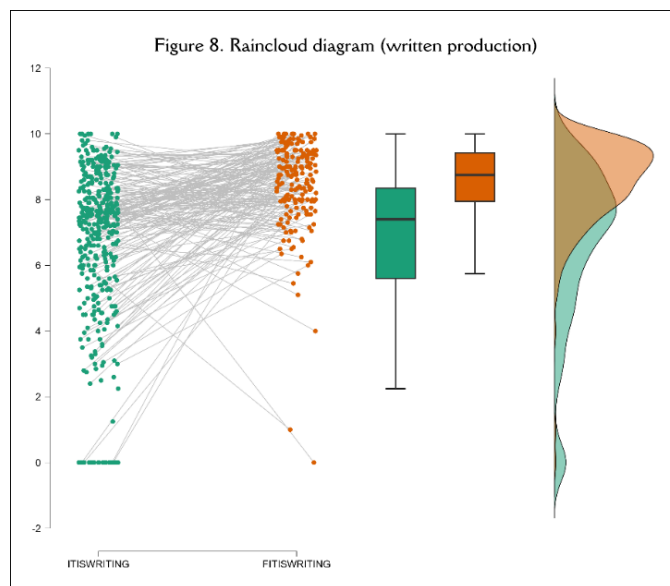
In the case of oral production, a non-parametric test is also applied. On this occasion, the alternative variable is that the ratings of the variable are higher after the intervention. The Wilcoxon non-parametric test is applied and the results shown in Table 6 (<https://doi.org/10.6084/m9.figshare.23145905>) are obtained. Regarding the effect of the intervention on the distributions of the sample, the raincloud diagram (Figure 7) is very illustrative since the distribution of the values of measure 2 (FITIS oral production) around higher values (close to 9) is clearly appreciated.



The descriptive statistics of oral production (Table 7, <https://doi.org/10.6084/m9.figshare.23145986>) follow the trend of the previous variables whereby the difference in the standard deviation is very pronounced. This is directly related to the shape of the raincloud diagram, since the values after the intervention tend to be more homogeneous and higher, as is the post-test distribution (orange colour). The aspect of the percentage reduction is noteworthy, since there is a drop of 62.91% in the standard deviation from the pre-test to the post-test. This is a very positive statistical indicator given that if the percentage increase in the average qualification of this variable (48.05%) is taken into account, the trend is clearer than in the previous variables towards the improvement of this skill and the homogeneity of performance.

3.2.4. Written production

Written production is studied in a similar way. As previously seen, the alternative hypothesis is considered to be that the scores obtained by the participants in the post-test are higher than those obtained in the pre-test. The Wilcoxon test is applied and the results obtained are shown in Table 8 (<https://doi.org/10.6084/m9.figshare.23146079>).



The raincloud graph (Figure 8) confirms the trend of the other studied variables (oral production, oral reception and written reception). In the post-test case, the sample distribution

generates greater values and the dispersion is lower. The descriptive statistics analysis (Table 9, <https://doi.org/10.6084/m9.figshare.23146160>) confirms what can be appreciated in Figure 8. Although in this case the decrease in the standard deviation is not excessively pronounced, this does transpire to be the case in the average difference. With regards to this variable, the percentage reduction of the standard deviation is statistically significant since the pre-test is 42.68% greater than the post-test. This results in the differences becoming less pronounced and the hypothesis that this type of intervention has a considerable homogenizing potential can be readdressed.

3.3. Performance analysis

Another aspect of interest is the performance during the course, which was evaluated through a series of rubrics designed on an ad hoc basis for each DAT modality. It should be pointed out that the difficulty levels of the LPs for each modality increased progressively and that the modality changed for every three LPs. Figure 9 (<https://doi.org/10.6084/m9.figshare.23146250>) shows the participants' progress from the first to the final LP and Table 10 (<https://doi.org/10.6084/m9.figshare.23146346>) lists the scores for each LP. In it, the following sections can be distinguished:

- Section I [LPS1-LPS3]. In this section, the qualification trend decreases as a result of the incremental difficulty of each LP and due to the students having to learn to subtitle.
- Section II [LPS3-LPD2]. This section shows increases and corresponds with the beginning of the revoicing modes. Although the difficulty is incremental, the students have become familiar with DAT and in these modes the software is the same for both voiceover and dubbing.
- Section III [LPD2-LPAD1]. In this section the trend decreases. LPD3 requires students to use creative dubbing, which is a challenge as there is a specific request to reformulate a text in a humorous manner. The scores decline until LPAD1, and this can be attributed to the fact that AD is an AVT modality that is based on intersemiotic translation, itself an added challenge.
- Section IV [LPAD1-LPSDH1]. In this section students have become familiar with didactic AD and their scores have increased. In LPSDH1 there are no sudden changes, but this can be attributed to the fact that in this first session students already have a good working knowledge of the subtitling tools.
- Section V [LPSDH1-LPSDH3]. Finally, the scores decrease as a result of didactic SDHH probably being the most complex modality. Additionally, in the final LP, creative SDHH is also requested.

3.4. General perception analysis

This section addresses certain aspects which are considered to be of interest when conducting a holistic analysis of the intervention. Perceptions of the time dedicated to tasks and the modes preferred by the students will be examined.

In order to study the relationship between the time dedicated to each LP and the perception of the total duration of the intervention, a contingency analysis was carried out (Table 11, <https://doi.org/10.6084/m9.figshare.23154239>). This table is complemented by a Chi-Squared test (Table 12, <https://doi.org/10.6084/m9.figshare.23154320>). This analysis concludes that there is a relationship between both variables and that the participants who tend to consider the intervention to be adequate are those who have dedicated an average time of between 60 and 90 minutes for each LP. The approximate duration was an important element of the methodological proposal, given that the intention is that the DAT tasks can occupy the time of a single class or self-study session.

Another interesting aspect is to study which modality is favoured by the participants and these data are collected in Figure 10 (<https://doi.org/10.6084/m9.figshare.23154392>). Of the 201 participants who answered the final questionnaire, the majority (N=52, 25.9%) opted for dubbing, while for 25.4% (N=51), standard subtitling was the preferred modality. Both modes are positioned as the favourites, followed by SDHH with 18.4% (N=37), AD with 16.9% (N=34) and voiceover (N=15, 7.5%).

Of equal interest is the participants' general perception of the project. Figure 11 (<https://doi.org/10.6084/m9.figshare.23146496>) reflects how a large majority (N=157) showed a high

degree of agreement with the statement that their participation had met their learning expectations. It is of special interest to focus on the perception (Figure 12, <https://doi.org/10.6084/m9.figshare.23154584>) that the participants had of the inclusion of DAT in the language curriculum, where a large majority (N=163) expressed their degree of agreement with the convenience of including DAT tasks in the planning of language courses. Finally, Figure 13 (<https://doi.org/10.6084/m9.figshare.23154860>) highlights the favourable perception of the participants regarding the use of DAT in the classroom, especially when considering its potential to promote autonomous learning amongst students.

4. Discussion and conclusions

This piece of research is pioneering on an international level by presenting results boasting a large sample collated from numerous universities on the use of DAT as a didactic teaching resource and tool for learning a foreign language.

The main result to highlight, and which encompasses the first four proposed objectives, is that there are statistically significant differences that allow us to attest that DAT contributes to improvement in the English learning process as participating students improve in the four linguistics skills: written and oral reception and production. Integrated skills enhancement had been previously advocated for but never explored until now in this field of study. Additionally, there is notable progress in the students' skills in DAT and in a foreign language since the beginning of the didactic intervention, concurring with similar results from previous research (Talaván, 2020). Furthermore, students express a favourable perception of the didactic intervention and the use of DAT as a didactic resource in the classroom, declaring clear preferences for the modes which are more familiar to them: dubbing and standard subtitling.

This research opens new doors in the field of language didactics by providing empirical data on the didactic possibilities of DAT. The objective of the research is not to propose a specific language teaching method, but to contribute to the teaching and learning process by providing teachers with new tools and pedagogical resources that they can integrate into their teaching. To address weaknesses, it is worth mentioning the dropout rate (which, although expected, could always be lower) and the time to complete the LP, which, although it was adjusted to what was expected in many cases, in others it exceeded more than was expected. Both of these points will be studied more closely in future related research. It is also necessary to mention that the value of the results must be underplayed, taking into account the frenetic rate of technological transformation, which clearly impacts time and research processes, as well as paradigm changes in university education and in education in general.

DAT is a versatile tool that can be used at different educational levels (primary, secondary and university) and can be included both in traditional learning and in hybrid or virtual modes. The field of DAT is a fertile line of research and based on the present piece of research, more studies can be carried out on it. Future studies could focus on understanding teacher perceptions of the use of DAT as a teaching tool, analysing the cumulative effect of DAT as a resource pedagogy in longitudinal projects, or its inclusion in bilingual education programs that work with two languages. To the same degree, analysis of the use of DAT in multilingual environments (with co-official and/or minority languages), as well as the possibilities it offers to improve accessibility for students in the language classroom would also be of interest.

Authors' Contribution

Idea, A.F.C & N.T; State of the art, A.F.C; Methodology, N.T.; Data analysis, A.J.T.R; Results, A.J.T.R; Discussion and conclusions, A.F.C; Written composition (first draft), A.F.C; Final revisions, A.F.C; Project design and sponsorship, N.T.

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