

EFL written competence through twitter in mobile version in compulsory secondary education

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Abstract

The use of information and communication technologies in foreign language learning and, to be more specific, in English language learning has increased quite considerably since the commencement of the 21st century and, particularly, in the second decade of the 21st century with the introduction of mobile learning (m-learning) in our daily lives. Our aim, in this article, is to confirm whether the use of the Twitter social network via a mobile device helps Spanish learners of English as a foreign language (EFL) improve their quality of written expression in EFL and, especially, their summarising skill in the English language. We conducted a classroom experiment with students in year 4 of compulsory secondary education (CSE) at the time of the experiment. The participating students were level B1 according to the Common European Framework of Reference for Languages. Two research questions were established. Based on these, the following preliminary hypothesis was formulated: The use of the mobile version of Twitter has a positive impact on improving written expression and, to be more concrete, the summarising skill in EFL. The research model, which we selected, was action research, in accordance with which quantitative data were analysed to justify the outcomes of this empirical research. The data were satisfactory since learners improved significantly at the end of this current classroom experiment. This research on the use of Twitter in its mobile version could imply a starting point to conduct further empirical studies in this respect on English language teaching and learning in non-university education, such as primary education, CSE and baccalaureate.

Keywords: English as a foreign language; social networks; mobile-assisted language learning; written competence; summarising.

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1. Introduction

This study is shaped by the need to improve the quality of written expression in English as a foreign language (EFL) among a group of 46 compulsory secondary education (CSE) students who were in year 4 of ESO during the 2018–2019 academic year, within the educational context of state education. The framework for this article is the use of information and communication technologies as tools for EFL learning, and specifically the use of mobile versions of social media. We will therefore present the state of the art on mobile learning (m-learning) and, to be more specific, on mobile-assisted language learning (MALL). This study also emerged due to the lack of empirical research (Andujar-Vaca & Cruz-Martinez, 2017; Castrillo, Martin-Monje & Barcena, 2014; Montaner-Villalba, 2019) on the use of the mobile version of Twitter as a tool to boost written competence in EFL in the educational context indicated earlier.

The aim of this study was to verify whether the students' written competence was improved by using the mobile version of Twitter (<https://twitter.com/>) as a technological tool. At the end of this study, it is expected that the students would have improved their capacity for written expression through practice of the skill consisting of summarising in English using the mobile version of digital social media (Carrilla Perez, 2012; Sotomayor Garcia, 2010). The Twitter social network has a length limit of 280 characters. Therefore, the various activities presented in this experiment consisted of verifying whether the students' written competence had improved at the conclusion of the experiment through the skill of summarising in English.

1.1. Mobile-assisted language learning

Mobile devices have quite significantly altered and expanded the different ways in which e-learning is conceived, particularly in the second decade of the 21st century, due to widespread access of these complex and affordable devices (Miangah & Nezarat, 2012). Certain authors (Barcena & Read, 2008; Kukulska-Hulme & Shield, 2008; Trifonova & Ronchetti, 2004) have highlighted the characteristics of these mobile devices, such as their size and range, which provide students with affordable access to all resources. Mobile technology has advanced in the last decade, offering users the chance to access both educational resources and different forms of social interaction via the mobile device (Comas-Quinn, De-los-Arcos & Mardomingo, 2012), transforming this social interaction into a tool which, without a doubt, makes it possible to practise foreign languages. Furthermore, mobile telephones offer their owners time- and place-independent learning opportunities, thus facilitating the development of communicative competence, and its relevant skills, in foreign languages, orienting the language curriculum towards more authentic spoken communication (Kukulska-Hulme, 2012).

Concerning the scope of this study, we focused on the use of mobile instant messaging applications to improve written competence in foreign languages. As regards this scope, mobile instant messaging is conceived as a tool for both asynchronous and synchronous communication, functioning by means of wireless connections and devices via the Internet, enabling students to have a conversation in real time (Rambe & Bere, 2013). Both teacher–student and student–student interactions are increasing considerably due to the huge number of mobile applications that facilitate written communication between users.

Several empirical studies (Castrillo et al., 2014; Esquicha, 2018; Montaner-Villalba, 2019; Ramos, 2018; Ruiperez, Castrillo & Garcia Cabrero, 2011; Sanchez Ambriz & Martinez Balboa, 2018) have focused on the possibilities offered by these mobile devices – specifically, WhatsApp (Castrillo et al., 2014; Ramos, 2018; Sanchez Ambriz & Martinez Balboa, 2018), Instagram (Montaner-Villalba, 2019), and lastly, Twitter (Ruipez et al., 2011) – for improving students' written competence. However, Ruipez et al. (2011) explore the desktop version, not the mobile version, of Twitter as a tool to boost written expression in German. This makes this article valuable and significant in the field of study related to MALL. Furthermore, we have taken into consideration that there are few empirical studies on the mobile version of Twitter in CSE, as mentioned earlier in this article.

Additionally, although the aim of this article is to confirm a possible improvement in students' written expression through the use of the mobile version of Twitter, it is also worth considering several empirical studies (Andujar-Vaca & Cruz-Martinez, 2017; Ibanez Moreno & Vermeulen, 2015; Ibanez Moreno, Jordano de la Torre, & Vermeulen, 2016) that focus on the use of certain mobile applications for the purpose of developing speaking skills. Moreover, mobile devices also allow students to improve their vocabulary level in foreign languages (Pareja Lora et al., 2013).

Concerning the evaluation of mobile applications, it is worth highlighting the work of Martin-Monje, Arus-Hita, Rodriguez-Arancon and Calle-Martinez (2015), who present a rubric for the purpose of evaluating educational applications that focus on foreign language learning and teaching, thus becoming a valuable handbook for the creation of new apps. This article, among others, is the result of the work of the Applying Technologies to LAnguageS research group, within the framework of the Social Ontology-based Cognitively Augmented Language Learning Mobile Environment project.

Lastly, with regard to theoretical articles and therefore, non-empirical studies, on foreign language learning via mobile devices, it is well worth mentioning the article by Kukulska-Hulme, Norris, and Donohue (2015), who offer various pedagogical applications of mobile learning in EFL teaching. Also of note are Kukulska-Hulme and Viberg (2018), who present a state-of-the-art review on this subject, and Traxler, Read, Barcena, and Kukulska-Hulme (2018), who present a pedagogical approach which combines mobile learning, open educational resources and social learning.

2. Methodology

The method chosen for this research was actionresearch, since the author of this article fulfilled the double role of both researcher and teacher at the time this experiment took place.

2.1. Context and sample

As regards the context in which this experiment was conducted, it is a state secondary school offering compulsory secondary, upper secondary and vocational education. The school where the experiment – the object of study in this article – was conducted has a huge range of education programmes, including multilingual programmes, which fosters the content and language integrated learning approach; the learning and performance improvement programme for year 4 of CSE; the remedial programme for year 4 of CSE; and curriculum enrichment programmes, namely task-based learning, project-based learning, cooperative learning, servicelearning, etc.

Concerning the sample, it was made up of 46 students who were in year 4 of CSE during the 2018–2019 academic year. The entire group of students took part on an experimental basis, and consequently, the participating students used the mobile version of Twitter throughout the entire experiment. The students were chosen at random in this experiment. The age of the participating students ranged from approximately 15–16 years old. The students' English level was B1 according to the Council of Europe (2001).

2.2. Data collection tools

To collect the quantitative data for this article, a pre-test was first conducted. Second, two pieces of writing were used. And third, a post-test was conducted. There were, therefore, a total of four activities to boost the written expression in EFL by means of the mobile version of Twitter. All of these tasks were carried out at different times within the first and second terms of the 2018–2019 academic years. The pre-test was conducted before the experiment was initiated, the first activity was carried out during the first term, the second activity in the second term, and finally, the post-test was completed at the end of the experiment.

The quantitative data for this research was obtained from written competence activities using the mobile version of Twitter, with the final aim of verifying whether or not there was a significant improvement over the course of the entire writing process. The dependent variables were conceived as the scores for the different tasks, while the independent variables were classified as: (1) Composition process and (2) Final product. In this experiment, emphasis was placed on the final product. Given that this study focuses on the written expression through practice of the skill of summarising in English, within the final product (Shehadeh, 2011) the following variables were examined: (1) content of the text; (2) organisation and structure of the text; (3) grammar; (4) vocabulary use; and (5) spelling.

These variables were scored using the school marks system for CSE. Thus, an ‘excellent’ or A-level ranges from 9 to 10, a B-level ‘pass’ is between 7 and 8, a C-level ‘pass’ is a 6, a ‘bare pass’ or D is a 5, and lastly, a ‘fail’ or F means that the students failed both the various subjects in the official curriculum and the corresponding variables which were assessed in this study.

2.3. Procedures

This experiment was carried out during the 2018–2019 academic year, which started in the second half of September 2018 and ended in the first half of March 2019. During this period, the participating subjects used a total of four sessions, all of them in-person and in the classroom. Although each session comprised 45 minutes, approximately 15–20 minutes of each session were devoted to the experiment during the first and second term of the academic year indicated earlier. Table 1 shows the procedures carried out during the experiment, along with a description.

Table 1. Procedures and description

Procedure	Description
Pre-test	The initial evaluation test is conducted, along with the initial questionnaire, before beginning the experiment.
Experiment introduction	The teacher presents the experiment, explaining the aims, methodology and timing. The tasks to be carried out are distributed. This stage is conducted not only in an in-person session in the classroom, but also via email so that there is a record.
Experiment start	One in-person lesson is taught in the classroom to explain how the Twitter social network works.
Carrying out proposed activities	The tasks are carried out in the classroom during the two terms the experiment lasts. The teacher interacts with the students in person.
Post-test	Finally, both the post-test and the online assessment questionnaire and self-assessment are conducted.

2.4. Data analysis

In this study, we analysed the results of the different written activities carried out by the students throughout the entire process of the experiment in the first and second terms of the 2018–2019 academic year. To this end, the quantitative data obtained were analysed with the aim of determining whether the students improved their level of written expression and particularly, the skill of summarising in English by means of the mobile version of Twitter.

To obtain these quantitative data, the various activities carried out by the students were scored using numerical marks. These scores, according to the Spanish educational system, run from 1 to 10, with 1–4 being a fail, while 5–10 represent a pass. The numerical marks were used to score the different variables that made up the final written product: content of the text, organisation and structure of the text, grammar, vocabulary and spelling.

These numerical scores were recorded using Microsoft Office Excel software for the purpose of using a basic descriptive statistical analysis to calculate the average for the data relating to the different variables mentioned earlier. Next, having selected the mean scores for each variable in Excel, as well as the overall mean for each writing, these were turned into graphs for the purpose of analysing and, subsequently, justifying the results obtained in the experiment.

2.5. Research questions

The scientific field of this research is, one, improving the levels of written expression among CSE students and, two, confirmation or refutation of the assertion that the use of mobile versions of social media would improve the development of written expression in EFL by means of practice in summarising ideas. The following research question is thus established: Can the use of the mobile version of Twitter increase the quality of written expression and, specifically, the skill of summarising in English?

3. Results

In this section, we analyse the different results of the relevant writing activities by means of quantitative methods. The data in this study were collected through several writing activities and, particularly, focused on the skill of summarising by means of the mobile version of Twitter.

3.1. Quantitative data

Results were obtained from two writing activities, as well as the results of the pre-test and post-test. We begin by analysing the results of the pre-test. Figure 1 shows the mean results for the pre-test.

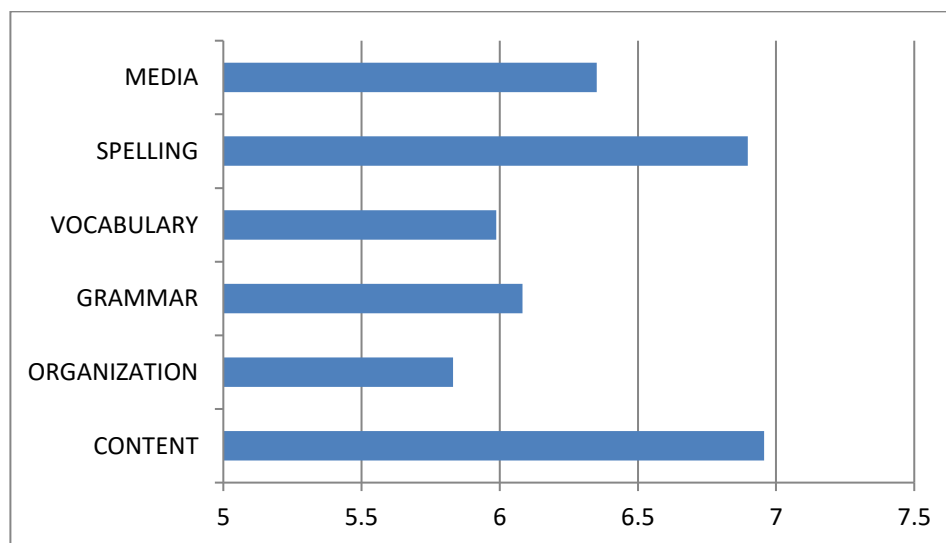


Figure 1. Mean results for the pre-test

The overall mean for the pre-test is 6.3. The *content* component (6.9) ranks first. It is followed by the *spelling* component (6.89). The third component is *grammar*(6.08). The fourth component is *vocabulary* (5.9) and the final component is *organisation* (5.8).

Second, we analyse the results for the two writing activities in the first and second terms, respectively. Figure 2 shows the mean results for the first writing, which was conducted in the first term.

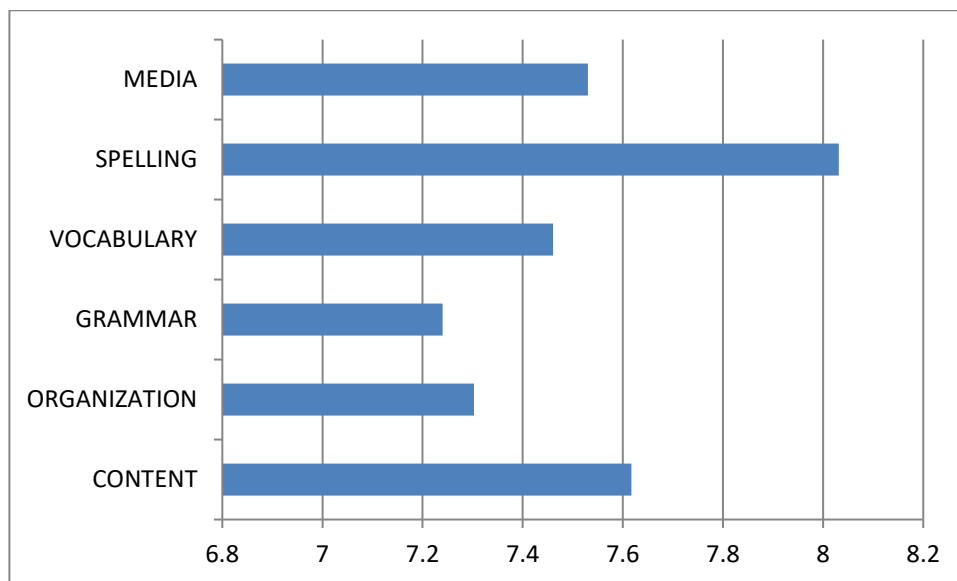


Figure 2. Mean results for the first writing

The overall mean for the first writing is 7.5. The first component with the highest score is *spelling* (8.03). It is followed by the *content* component (7.6). Next is the *vocabulary* component (7.4). The fourth component is *organisation* (7.3). Lastly, the *grammar* component received a score of 7.2. If we compare the results of the pre-test with the first activity, the mean for the pre-test (6.3) is significantly lower than the mean for the first activity (7.5).

Figure 3 shows the mean results for the second writing.

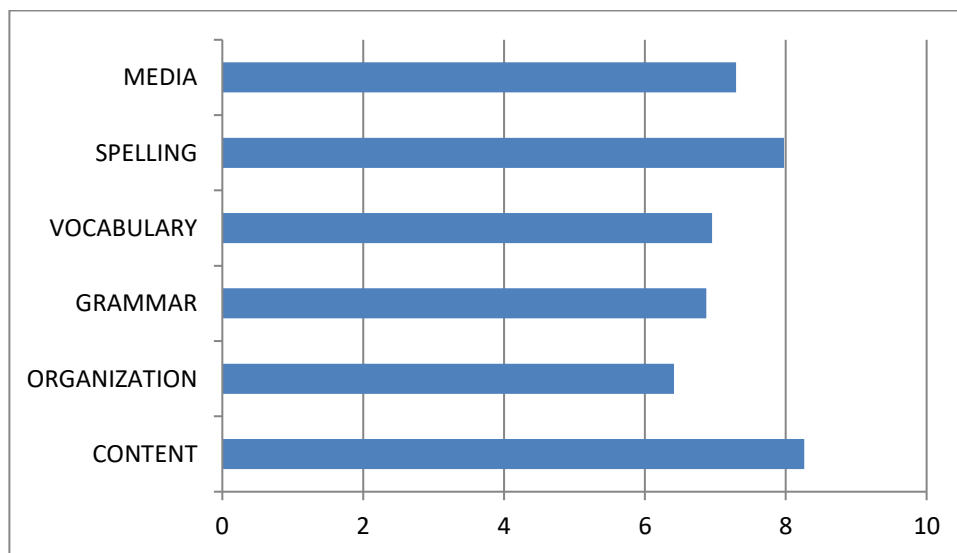


Figure 3. Mean results for the second writing

The overall mean for the second writing is 7.2. First comes the *content* component (8.2), followed by the *spelling* component (7.9). Next is the *vocabulary* component (6.9). The following component is *grammar* (6.8). The component with the lowest score is *organisation* (6.4). If we compare the two middle activities in this experiment, the overall mean for the first (7.5) is slightly higher than the second (7.2), there being no significant differences in statistical terms. With regard to the mean for the pre-test (6.3), we can clearly see that the mean for the second activity (7.2) has increased

substantially and, therefore, there are significant statistical differences between the pre-test and the second task.

Lastly, Figure 4 shows the mean results for the post-test.

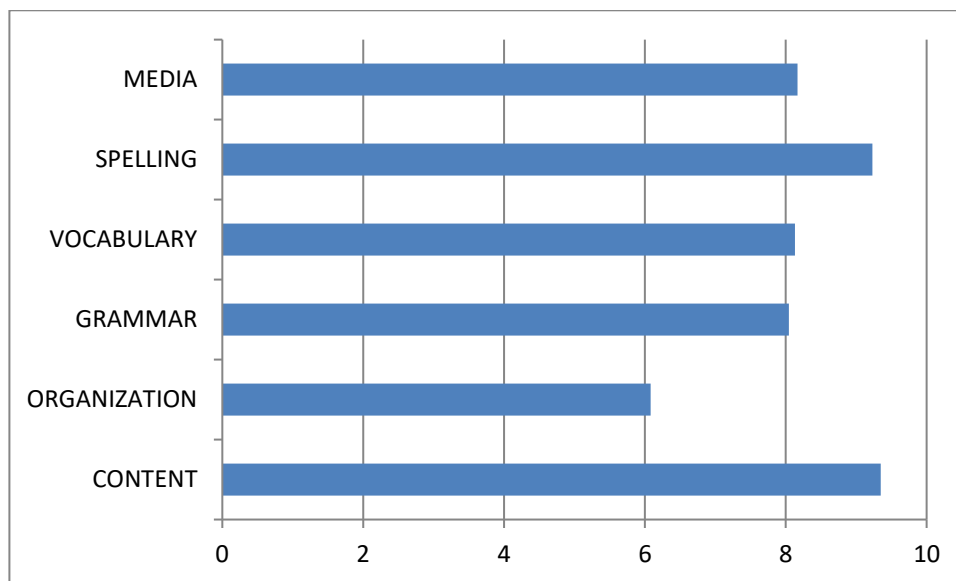


Figure 4. Mean results for the post-test

The overall mean for the post-test is 8.16. The component with the highest score is *content* (9.3). Next is the *spelling* component (9.2). In the third place is the *vocabulary* component (8.1), followed by the *grammar* component (8.04). The fifth component is *organisation* (6.08). If we compare the students' progress during the experiment, we find that the results improved significantly between the pre-test (6.3) and the post-test (8.16), there being, therefore, substantial differences between the two activities in statistical terms.

4. Discussion

This section justifies the reasons for which the results analysed during the experiment were obtained. We begin by analysing the possible reasons for the results of the pre-test. The aim of the pre-test was to measure students' starting level in writing and particularly, the level from which students were starting with regard to their skill in summarising in English. The overall mean for the pre-test is 6.3. This score could tentatively be attributed to the students having little practice in summarising as a skill in written expression, thus matching the initial expectations prior to the start of the experiment.

Concerning the first activity, *organisation* (7.3) had improved considerably when compared with the pre-test (5.8), possibly because the participants took into account creating a short and perfectly cohesive text, according to the principles of Twitter in terms of length. Concerning *vocabulary*, in this first activity (7.4), we see a substantial improvement in comparison with the pre-test (5.9). This improvement may have been due to external factors, namely the simplicity of the activity presented by the teacher/researcher. As regards *content* (7.06), we once again see an improvement compared to the pre-test (6.9). The reason for this improvement could tentatively be attributed to the limited or null quality of the pre-test by the students taking part in the experiment. With regard to *spelling*, we again find that the score for the first activity (8.03) is significantly higher than the pre-test (6.89). The students did not follow certain spelling rules in the pre-test. For this reason, the score for the *spelling* variable was lower in the pre-test than in the first writing activity. It should be noted that initial expectations prior to the start of the experiment are being met.

As regards the second activity, *organisation* (6.4) declined slightly in comparison with the first activity (7.3). This could potentially be due to the difficulty of creating a concise, cohesive text in Twitter, as is understood in other digital tools, such as blogs and wikis. However, this seems to be contradicted by the score for *organisation* in the pre-test (5.8), as this variable improved substantially in the first activity. As regards *grammar* (6.8), the score is substantially worse in comparison with the pre-test (8.04). Additionally, if we compare the second task (6.8) with the first activity (7.2), we find a slightly worse score in the second activity. This decline in the second task is strange if we consider the limited number of characters permitted by the Twitter application, and consequently, the little margin for making grammatical errors. As regards the other components, the same situation is repeated, with a significant drop when compared to both the pre-test and the first activity. The possible reason for this significant decrease in the second activity may tentatively be attributed to external factors, namely motivation or lack of attention on the part of the students during this second writing activity.

Thirdly, as regards the results of the post-test, we found a considerable increase between the pre-test (6.3) and the post-test (8.16) scores, with the score for the post-test being significantly higher than that for the pre-test. These results, therefore, indicate that there was in fact meaningful learning at the end of the experiment, and consequently, the students improved their summarising skill in English by means of the Twitter mobile application. It may thus be inferred, based on these results, that written competence in EFL had improved at the end of the experiment, regardless of the fact that the results declined slightly during the second activity carried out in the second term.

Having discussed in a concise manner the findings of this research, we will next compare this research with the outcomes from other researches. While, on the one hand, in this article, we aim at determining whether EFL learners at Secondary Education improved their summarising skills through Twitter in its mobile version, Montaner-Villalba (2019), on the other hand, focused on exploring the use of Instagram to prove whether EFL students at A-level improved their writing skills. In this research on Twitter in its mobile version, we only analyse outcomes from a treatment group, whereas Montaner-Villalba (2019) reveal findings from both a control as well as a treatment group. The outcomes from this article show that participants notably improved their summarising skills when using Twitter in its mobile version. However, the outcomes from Montaner-Villalba (2019) proved that the control group obtained better results than the treatment one, even though learning experience in the control group was not relevant in the control group.

In addition, it is also worth mentioning the research by Sanchez Ambriz and Martinez Balboa (2018), who focused on the use of WhatsApp as a tool to enhance both oral as well as written competence. The authors, in this research, analysed the outcomes comparing both a treatment group and a control one, while we aimed here at analysing only the results from the treatment group. Findings from Sanchez Ambriz and Martinez Balboa (2018) revealed the participants at the virtual modality achieved better scores in the post-test in both the oral and written competence than the learners from the control group. It must be noted that the research by Sanchez Ambriz and Martinez Balboa (2018) follows similar results as that by Montaner-Villalba (2019).

5. Conclusion and recommendations

In this article, we have offered a response to the research question formulated with regard to this study. With regard to the research question, as to whether the use of the mobile version of Twitter can increase the quality of written expression in EFL, and specifically the skill of summarising, it is possible to respond affirmatively that, based on the results obtained during the experiment, the students improved as regards the quality of their written expression by means of the Twitter application on a mobile device. It can thus consequently be deduced that there was in fact meaningful learning during the experiment which was the objective of this study investigation.

In conclusion, in consideration of the limited number of publications (Montaner-Villalba, 2019) on MALL in English as a foreign language teaching in compulsory secondary, and therefore, non-university

education, this article is of significant value in the field of study of language learning by means of a mobile device. It is therefore necessary to conduct further empirical studies in this respect on English language teaching in non-university education, with the aim of stimulating not only written competence in EFL but also digital competence, learning to learn and independent learning, all of which are twenty-first-century skills. Moreover, it would be recommendable to do further research on MALL in Secondary Education not only to enhance the written expression of EFL, but also to promote other linguistic skills, such as the oral competences (listening and speaking) as well as reading competence.

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