The attitudes of English-as-a-Foreign-Language students towards the learning usefulness and benefits of Google-Drive for Collaborative Writing

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Abstract. This study examines undergraduate EFL learners' perceptions of the usefulness of a web-based application for collaborative writing, namely Google Drive. Upon completion of a form-focused output-based language learning task using the Google Drive application for synchronous collaborative editing of documents, two students participated in an interview examining the computerized task's accessibility, language learning benefits and its limitations. Students showed positive attitudes towards the use of technological tools in language education. Furthermore, they perceived language gains in regard to grammar, vocabulary, and punctuation. Some difficulties acknowledged by the students related to initial accessibility, distraction, and disorganization of turns for written contribution. In light of these findings, some pedagogical suggestions are put forward for the integration of computer-enhanced interactional tasks to promote L2 written output in the L2 classrom.

COMPUTER-MEDIATED INTERACTION AND SECOND LANGUAGE EDUCATION

The integration of information and communication technologies (ICTs) in language education has been promoted by theoretical and empirical research produced in various strands of second language acquisition and computer-assisted language learning (see Grguurovic, Chapelle, & Shelley, 2013; Izquierdo, 2014; De la Cruz & Izquierdo, 2014). From a psycholinguistic perspective, building upon Long's (1996) Interactional Hypothesis, Chapelle (2001) has argued, for instance, that computer-based interactional tasks promote negotiation of meaning that creates the necessary conditions for learners to attend to and restructure ill-formed language. Within this theoretical orientation, Blake (2000), De La Fuente (2003) and Pelletieri (1999) among others have conducted empirical research to examine the manner in which Computer Mediated Interaction (CMI) creates the necessary conditions for language learning to occur, especially in synchronous computer-based interactional tasks. These studies have proven that, as learners interact during information exchange tasks, they notice lexical gaps and ill-formed morphosyntax. In these circumstances, learners may engage in transactional moves whereby the more proficient learners scaffold language production among their less proficient peers. Furthermore,

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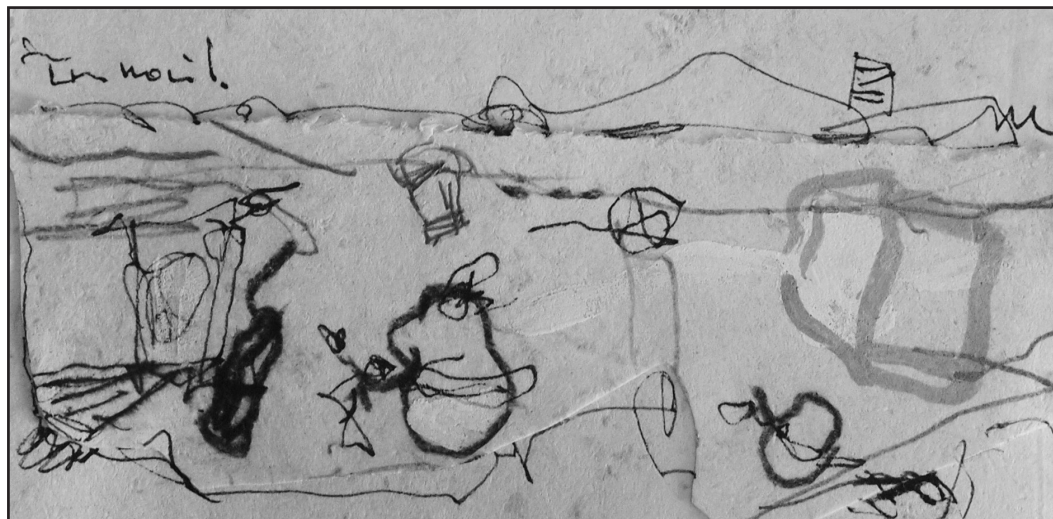
6. ¿Alguien podría decirme por qué cada día hay menos sitio para la pintura y para los pintores? (detalle), 2016.

studies examining CMI through tools such as chats, e-mails, and instant messaging via mobile communication (Shang, 2007; Kim et al., 2013; Ranalli, 2008; Pelletieri, 1999), for example, have yielded positive results on syntactic complexity, vocabulary, syntax, and strategic and communicative competence.

Despite the evidence supporting the effectiveness of technology to enhance second language learning, Bax (2003) acknowledges that the integration of ICTs in language education is a long way from reaching its optimal state in the various layers of the educational systems (e.g., Felix, 2004; Izquierdo, Aquino, García, Garza, Minami & Adame, 2014; Izquierdo, Simard, & Garza, in press). Moreover, Yen, Hou, and Chang (2013) indicate that computer-enhanced language learning is still limited and needs to be further explored. Regarding the use of computer-enhanced interactional tasks in language education, research has been conducted mainly around blogs (Dippold, 2009), conferencing (De los Arcos, Coleman, & Hampel, 2009), emails (Vogt, 2006), multimedia (De la Cruz & Izquierdo, 2014; Izquierdo,

2014), podcasts (O'Bryan & Hegelehimer, 2007), simulations (Ranalli, 2008), Wikis (Kessler, 2009), and social networks (Rubrico, & Hashim, 2014; Yen-Chen, Huei-Tse & Chang, 2013) to mention a few. Nonetheless, the language learning opportunities resulting from the use of other ICTs that allow for collaborative interaction around file sharing systems such as Google Drive, iCloud, or Dropbox, still remain to be explored.

RESEARCH QUESTIONS AND DESIGN

This study aimed primarily at the examination of the participant's perceptions of an ICT application, namely Google Drive Collaborative Writing, in regard to its accessibility, its language learning benefits and its limitations. Google Drive is a synchronous communication web-based application that enables users to store files and edit documents collaboratively monitored by an organizer. This computer application was selected for the study on the following criteria. First, Google Drive can allow for synchronous collaboration while creating

logs of participants' contributions throughout the writing process. Second, collaboration during the use of the application can be examined in light of SLA theories such as collaborative learning (Vygotsky,1978; Lantolf, 2000), negotiation of meaning (Long, 1996) and noticing (Schmidt, 1990, 1994, 1995a), as recommended by De la Fuente (2003). Third, the use of this application only demands a computer station and Internet access, which are available for language learners both in their current educational settings and home. Finally, most university students nowadays are familiar with text processors, such as Word, for written assignment completion in their undergraduate courses. Thus, collaborative interaction around a Word document available in Google Drive would not demand any additional technological competencies among participants.

The questions that guided this project were: Q1 What are the perceptions of English language learners of the usefulness of Google Drive for language learning? Q2 How do these perceptions relate to current theoretical claims and empirical evidence of the potential language

learning benefit of applications that allow for collaborative interaction around an L2 production task? In order to answer these questions, a small-scale case study was conducted with university learners of English as a foreign language to explore their perceptions of the computer-enhanced educational task and its language learning benefits. Data were collected through an interview conducted right upon completion of a Google Drive collaborative writing task. This data elicitation procedure allows L2 researchers to collect information on specific dimensions of a L2 learning process that learners have recently experienced (see Mackey & Gass, 2005). Due to the small number of participants, qualitatitave rather than quantitative accounts of the learners perceptions are presented in the analysis and the result sections. Data analyses were build upon comparisions of the participants' perceptions against theoretical claims and research evidence on the potential language learning benefits of Web-based applications of this nature, used for language education purposes.
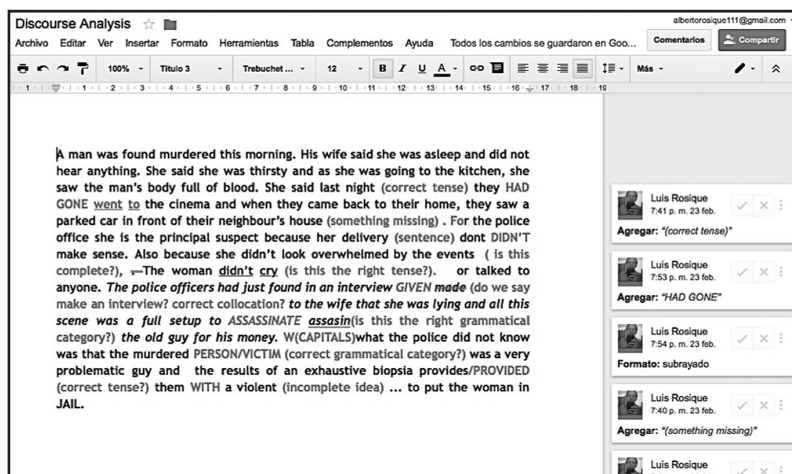
PARTICIPANTS AND COLLABORATIVE WRITING TASK

This study was conducted at a southern public university in Mexico with six students who were enrolled in an upper-intermediate English class of a BA in Modern Languages. Students participated in a form-focused task using a shared Word document through Google Drive Collaborative Writing Application. A 'form-focused task' is a communicative task whose primary goal is meaning and in which the focus on form occurs as incidental or as focalized on participants' linguistic needs (Ellis, 2006, pp. 100-101, cited in Kessler, 2009). The objective of the task was for students to collaborate on the development

Appendix A
Figure 1. Screenshot of students' written output with teacher's annotations.

of a coherent and cohesive written narrative.

The participants gathered in the library's computer room where they received instructions to accomplish the task. The task was completed in a single session. The students used or created a Gmail account, logged in into their accounts, and were directed to the Drive application. Once in the Drive, the students were instructed to open a document that contained the beginning of a story. They were told to create a story in collaboration starting from the lines given. Although all the students were able to contribute to the story at the same time, they were strongly recommended to take organized and sequenced turns. During the development of the task, students were also encouraged to self or peer correct. Although, Long (1996) argues that 'inductive or student-initiated attention to grammar may be most effective' (cited in Kessler, 2009, p. 80), Figure 1 shows that the first author introduced annonations in the text, as the students generated their sentences, to encourage reflection on errors the students seemed not to notice. The activity closed with a teacher-led analysis of the

cohesion and coherence of the final product, along with explicit correction of the errors students were not able to correct by themselves. The session lasted approximately 30 minutes.

DATA COLLECTION INSTRUMENT

In order to answer the research questions that guided this study, upon completion of the form-focused task, four students, randomly selected, participated in a structured retrospective interview. Two of these students underwent the interview, in a pilot stage fashion. These students were asked each interview question, and were asked whether they understood the question or whether something in the question was not clear. Unclear questions were reworded in the spur of the moment, and were noted down. The other two students were then interviewed using the final version of the interview questions.

Table 1 shows that the final version of the interview contained seven items eliciting students' perceptions of Google Drive Collaborative Writing application with respect to

Table 1. Synthesis of learners' perceptions of the computerized collaborative task

Question	Student 1 Opinion	Student 2 Opinion
1. What is your opinion about the usefulness of technological tools such as Google Drive in learning a second language?	These tools promote interaction for teachers and students. The tools facilitate collaboration and allow us to clear up doubts.	These tools are useful. These tools are a way to practice or learn things and are attractive for students.
2. What did you learn through this activity?	I was able to increase my vocabulary by reading the contributions of my classmates. Moreover, I was able to improve my grammar.	I learned about the past perfect and the use of punctuation marks to keep the narrative thread of the story.
3. What difficulties did you find in the development of this activity?	I found two problems in the development of the activity: access to the application and distraction.	An issue for me was the fact that I did not have a Gmail account and I had to create one in that moment. Another issue was disorganization of turns in the development of the writing task. I consider it necessary to follow teacher's instructions so as not to lose organization.
4. How motivating was this activity for you?	It motivated me in such a way that I am really interested in completing more of these activities.	This activity was motivating, because it enabled me to become aware that we can improve writing, text comprehension and grammar in the classroom and through this application.
5. What are the advantages of developing writing with the support of Google drive in comparison to writing in a face-to-face session?	One advantage is that you can correct your writing easily. Another advantage is that you have enough time to think about what you are going to write.	I think the most important advantage is that everybody can participate in the same activity at the same time. You can feedback your classmates' writing or you can receive feedback from your teacher. It is difficult for teachers to analyze a text in depth in face to face sessions and this has an effect on learning.
6. How familiarized were you with this application?	I learned about this application two years ago and I still use it to interact with my employees.	It was the first time I used it. Nonetheless, I found it easy to use and practical.
7. How feasible do you think it is to implement this application in your school?	I think there are three reasons that will not facilitate the implementation of this application to language lessons in this university. First, it will depend on how skilled teachers are to implement the application; second, not all students have immediate access to a Google e-mail account; third, Internet connectivity.	It will depend on whether the university offers the appropriate equipment and facilities to administer the activity. Students need access to a personal computer and Internet. In my opinion, our classrooms are not appropriately equipped to integrate computer applications into the lesson.

its implementation, language learning benefits and limitations. Table 1 shows that participants were asked about their perception of the usefulness of the application for language learning, what they thought they had learnt, the difficulties they encountered in the development of a task using the application, how motivated they were as a result of using the application, what differences they identified between the ICT lesson and a non-ICT lesson, how familiarized they were with the application, and how plausible the implementation of a lesson of this nature in their educational context would be.

DATA ANALYSIS AND RESULTS

The interviews were audio-recorded and transcribed. Students' answers to each of the questions were synthesized and presented in Table 1. In order to address Research Question 1, the students' answers to the interview questions were first compared and contrasted. To address Research Question 2, students' answers were then compared to previous research on the effectiveness of ICT applications similar to Google Drive Collaborative Writing.

Regarding question 1, both students show positive attitudes towards the beneficial use of this technology in education. While Student 1 praises collaboration and interaction as main advantages, Student 2 praises learning potential and attractiveness. This information is congruent with Dippold's (2009) claim in that students are starting to visualize the multiple advantages of using technologies of this kind in pedagogy. Nonetheless, this finding contradicts Kim et al.'s (2013) argument that students are still resistant to learning with new technology.

With respect to question 2, Student 1 and Student 2 coincide in that they both improved their grammar and vocabulary through this activity. This finding substantiates Storch's (2005, cited in Kessler 2009) argument that small collaborative tasks contribute to grammatical gains. Similar to these learners' perceptions, in Shang's (2007) study, learners claimed to have improved their writing skills in terms of vocabulary. This finding also lends support to Ellis' et al. (1994, cited in De La Fuente, 2003) claim that interaction facilitates the acquisition of vocabulary.

As for question 3, both students agree that one of the difficulties the activity posed was the hassle of creating a Gmail account in order to access the application. Although,

this issue did not repesent a major challenge for the development of the task, Kim et al. (2013) warn of the risk of students often getting frustrated, stressed or anxious if new technology is not easy to use. Within the same question, Student 1 mentioned external distractors. This finding corroborates Izquierdo's (2014) argument that, during ICT task completion, students tend to lose focus, which, in turn, can prevent them from mapping meaning and form during form-focused instruction. For his part, Student 2 acknowledged the need for the teacher as an organizer during this kind of activity since he perceived turn-taking as chaotic. Studies (Herring, 1999, 2009; Nardi, Whittaker & Bradner, 2000; Thorne, 2000 cited in Hattem, 2014, p. 156) have demonstrated that dialogic computer synchronous communication foster relaxed interactional norms. Moreover, computer mediated pedagogy is not a natural form of communication (Blake, 2008 cited in Yen, Hou & Chang, 2013, p. 3). This might have fostered the student's feeling of disorganization in this synchronous collaborative writing activity.

Regarding question 4, both students found the activity motivating. Student 1 manifested his eagerness to further carry out similar activities while Student 2 categorized this application as an alternative to classroom writing. The students' motivational attitude toward the perception is congruent with learners' feeling motivated as a result of using technology for language learning as demonstrated in Yen, Hou and Chang (2013). Some studies (Beauvois,1992; Kelm, 1992; Kern, 1995; Sanchez, 1996) reveal the potential of written computer-mediated communication to increase learners' motivation (cited in De los Arcos, Colemand & Hampel, 2009, p. 4).

In reference to question 5, among the advantages of using this application for writing in comparison to a conventional face-to-face lesson, both learners acknowledge the possibility to modify their writing easily and slowly, the maximization of students' participation, and the possibility to receive immediate feedback from the teacher and peers. In regard to this issue, Yen, Hou, and Chang (2013) and Shang (2007) claim that written computer mediated communication allows learners time to prepare their contributions and has proven to lower anxiety and increase participation. As far as teacher and peer feedback is concerned, students' opinions are congruent with the findings in Dippold (2009) and Lee and Markey (2014). Their findings suggest that learners enjoy peer and teacher feedback because it enables them to have different perspectives on their performance and compare their task to peers' tasks. According to Ortega (2007 cited in Kessler, 2009) the act of collaboration provides more opportunity for practice. Vygotsky (1978) claims that *collaboration* results in effective linguistic feedback (cited in Kessler, 2009, p. 80).

When presented with question 6, Student 1 reported having some experience in using the application. Contrastingly, in spite of her lack of experience with using the application, Student 2 claimed she had found it practical and easy to use. None of the students had problems with managing the application. The reason for this might be due to the fact that the activity did not require great technological ability and it equated with managing a Word document but in collaborative form.Finally, regarding question 7, although students showed enthusiasm toward using Google Drive as a supporting tool for writing in their language class, they acknowledged issues that would impede its implementation in their university. Both students coincide in that there is neither appropriate equipment nor existing facilities in their school to integrate this application into a language lesson. Besides, Student 1 remarked that teachers might lack the necessary training.

DISCUSSION

The aim of this small-scale research was to examine the participant's perceptios of the usefulness of a CALL application, namely Google Drive Collaborative Writing, with regard to its implementation, its language learning benefits and its limitations. Overall, students showed positive attitudes toward the use of technological tools in language education. This finding is congruent with Dippold's (2009) finding that the educational community is starting to realize about the multiple advantages of using technologies in pedagogy. Furthermore, students' perceptions about language gains were limited to gains in grammar, vocabulary, and punctuation knowledge. These findings coincide with empirical evidence (Storch, 2005 cited in Kessler, 2009; Shang, 2007) that revealed language gains in grammar and vocabulary in learners who employed written computer mediated communication. Among the difficulties in carrying out the activity, students only described as that of a hassle the fact that they had to create a Gmail account to use Google Drive. Nonetheless, with regard to the application itself, both students rated it as user-friendly.

The ease of use for this application might have accounted for students' apparent feeling of comfort. Kim et al. (2013) explains that students often get frustrated, stressed or anxious if new technology is not easy to use. Another remarkable issue raised by students was that they perceived a disorganization of turns while they were developing the task. Although they were highly recommended to take organized turns when contributing to
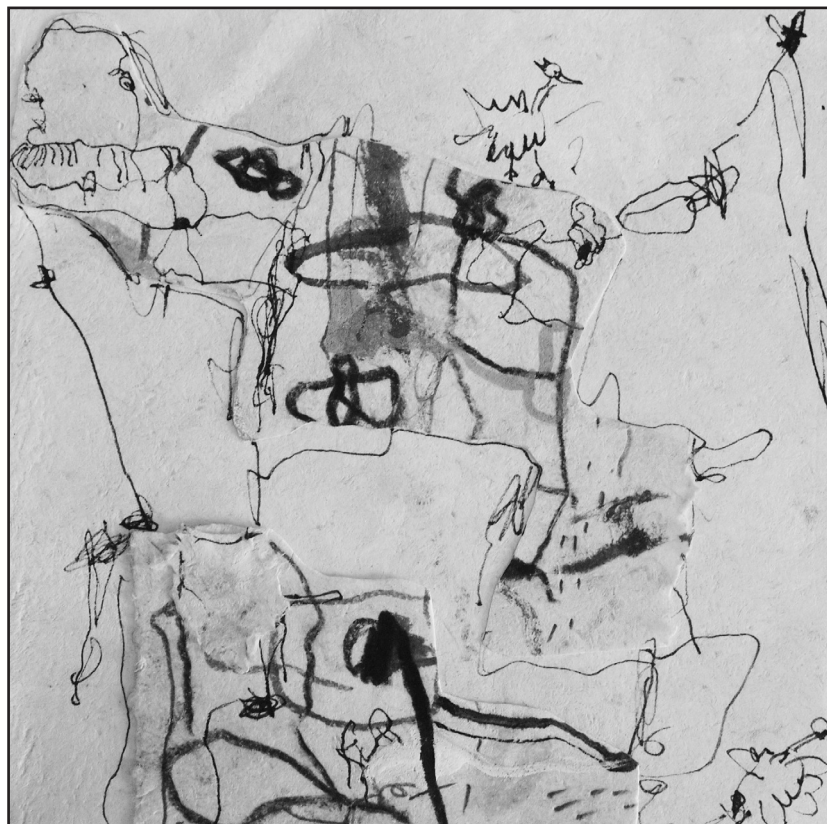
9. ¿Qué piensa ahora mi pajarito adorado?, 2016.

the story, eventually, the students started to edit the document all at the same time. Interestingly, some research works (Herring, 1999; Nardi, Whittaker & Bradner, 2000; Thorne, 2000 cited in Hattem, 2014, p. 156) have demonstrated that dialogic computer-based synchronous communication fosters relaxed interactional norms. Online real-time interactions in which multiple participants intervene tend to lack turn-taking organization. The students' appreciation of turn-taking chaos during the task might be a result of their limited experience with taking part in synchronous computer-mediated interactions with multiple participants. Furthermore, since real-time online communication bears some resemblance with face-to-face conversation, the students might have associated this synchronous computer-mediated task with face-to-face oral interaction (in oral interaction participants have greater control of turn-taking no matter how many people take part in the dialogue) and this contributed to their feeling of turn-taking disorganization.

Overall, the activity resulted motivating for both students. This finding is in line with evidence of students feeling motivated as a result of using written computer-mediated communication (Yen, Hou & Chang, 2013; Beauvois,1992; Kelm, 1992; Kern, 1995; Sanchez, 1996 cited in De Los Arcos, Coleman & Hampel, 2009, p. 4). Also, students outlined the advantages of using Google Drive Collaborative Writing compared to a face-to-face lesson. They mentioned that through this application they can modify their writing easily and they can write slowly, it maximizes learners' participation and it results in immediate teacher and peer feedback. This perception is supportive of the empirical finding that Web applications of this type allow students to read, re-read, focus and reflect about language features, and self-correct mistakes (Kitade, 2000; Salaberry, 2000 cited in De La Fuente, 2003, p. 50). Student 2 claimed that it is hard for teachers to analyze texts in depth in face to face sessions. This perception corroborates Dippold's (2009) finding that an 'advantage of electronic feedback is that it brings with it the potential to speed up the feedback process considerably in comparison to non computer-mediated environments' (p.21). Finally, students believe the lack of equipment, facilities and teacher's training impede the implementation of this appli-

cation in their current language learning context.

CONCLUSION

Students' positive perceptions toward the use of this web-application for learning language and their claims about feeling motivated to learn languages with technology appear to be a good sign for the implementation of ICTs in language classrooms in this context. In an analysis of the effectiveness of computer-assisted language learning (CALL), Felix (2004) has argued that students' perceptions of CALL are positive as long as technologies are stable and well-supported (p.16). If we take into consideration Felix's (2004) argument that students will show positive attitudes toward the use of computers in language instruction provided that technologies are stable and well-supported, it would be important for teachers to take into consideration some implementation issues raised by learners in this study (see also Izquierdo, Simard, & Garza, in press).

For example, upon implementation, teachers would need to make sure that the learners and their teachers themselves have the necessary technology skills and that the necessary infrastructure exists in their context, as lack of infrastructure and technopedagogical competencies constitutes a major challenge in computer-assisted language learning across educational layers (Izquierdo et al., 2014). Furthermore, students doubted their classrooms were equipped with the needed computers and internet connection for all learners. If web-based applications are to be implemented, computer and internet service are the minimum requirements. A measure against this issue would be for teachers to explore the necessary infrastructure in areas outside their classroom, although this con-

tradicts Bax's (2000, cited in Bax, 2003, p.23) vision of *normalization* in which technologies are seen as invisible classroom support materials. In the same vein, participants' claims of language gains resulting from the use of this application might be explained through the potential of computer-mediated communication for beneficial focus-on-fom (Levy & Stockwell, 2006 cited in Kessler, 2009). This claim makes Web-based applications of this nature a potential platform for second language acquisition. In the same vein, students highlighted the positive impact of immediate teacher and peer feedback on their learning. Learner's perception in this sense align with Dippold's (2009) claim of the positive feelings of learners toward teacher and peer computer-mediated feedback. Nonetheless, the beneficial impact that this web-application would bring for students' language learning in the long term is yet to be explored. Moreover, building upon findings by Izquierdo, Simard and Garza (in press), further research is needed to examine the type of attitudes that this application enhances, and their direct impact on L2 learning.

In regard to the teacher's role in ICT-enhanced lessons, learners' remarks deem the presence of a teacher as critical in technology-based language lessons. This calls for a permanence of the teacher in the role of an organizer, a monitor and a feedback-provider. Indeed, Ayres (2002) study found the same perception in students who claimed that they did not see CALL as a substitute of the teacher's labour. Nonetheless, while students in this study reported a Web application such as Google Drive Collaborative Writing is easy to handle, they also acknowledge that teachers may lack the skills to promote its use. This then calls for professional development programs that help teachers to develop the required

techno-pedagogical competencies that they need to effectively implement ICT-enhanced lessons.

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