Using Duolingo to Improve Beninese Secretarial Advanced Learners' Oral Communication Skills

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Abstract
This paper focuses on examining the use of the Duolingo App as a supplement to the traditional ESP courses in Secretarial Studies, for Advanced ESP learners Classes of Lycée Technique et Professional de Porto Novo (LTP-PN), in the Benin Republic. The Objective is to assess substantial improvement of Learners Oral Communication skills after 3 months of studious use of mobile language learning apps. An experimental mixed-method research design in two stages have been used. During the first stage, quantitative data was collected using questionnaires administered to Ten (10) ESP teachers and Forty (40) randomly selected ESP secretarial studies learners of LTP-PN. Qualitative data was also gathered during classroom observations. In the second stage, the experimentation process involving the Experimental Groups (EG), which received the treatment, that is "*the use of Duolingo for 15 Mn"*, and the Control Group (CG) were tested. The data was collected and computed using one way ANOVA test in SPSS 26. The result shows a statistical significance between the use of Duolingo and Secretarial Studies ESP learners' oral proficiency improvement. This paper further suggested that mobile learning apps such as Duolingo should be used as a supplement to the traditional ESP courses. It also pointed out the necessity for ESP teachers to invest in their professional development rather than waiting for the government.

Keywords: **Secretarial Studies learners, Duolingo, Oral Communication, ESP**

Introduction
Today's English for Specific Purpose teaching-learning must be competency-based and should integrate digital literacy. There is need for ESP language learning to promote autonomous learning in order to access the limitless resource available online via computers or mobile devices so as to supplement the traditional curriculum. The objective is to overcome the impediments of the traditional teaching-learning process in foreign language contexts. The main problem of the ESP teaching-learning process in Benin is the poor language exposure and the seeming irrelevance of English in learners' daily communication needs especially out of the classroom settings. The direct consequence is that English language has gradually been restricted to a mere classroom subject and its success is guaranteed by assignment completion and grammar items memorisation.
The problem is that most teachers still stick to the traditional grammar-translation method

despite the two decades of the implementation of the Competency-Based Approach that has theoretically been set out for communicative competence development. This results in ineffective teaching-learning processes and highlights the mediocre performance of Beninese ESP learners, especially for secretary studies field in Lycée Technique et Professionnel de Porto Novo. These students are trained to be skilled secretaries and assistants and a sound communicative skills development is needed for them to be effective bilingual professionals.

In the context of the COVID-19 pandemic, with the protective measures and the development of distance learning, it is vital to create an effective yet attractive continuum that sustainably draws learners' attention and interest to an autonomous self-regulated and low anxiety learning process out of the classroom settings. This continuum, set by ESP teachers whose responsibility is to raise learners' awareness of the necessity to practise the language out of the classroom settings, can be created by language learning apps. One of the most effective apps available from the wide range of the increasing number of foreign language learning apps available on google Android and Apple's IOS is Duolingo. Duolingo uses adaptive learning technologies, which can tailor the tasks to the level of each student. The students use the app online, either in its mobile version or in their web browser. Therefore, this app takes advantage of today's learners' interest in digital media and content. This can consistently increase language exposure and offer real possibilities to improve their communicative competence.

Consequently, this paper assesses the impact of using Duolingo to complement traditional teaching-learning courses on LTP-PN secretarial ESP learners' Oral communication skills development in the COVID-19 pandemic context. The objective is to see whether Duolingo can be used efficiently by students out of the classroom settings, according to their level and needs, to improve and expand what is covered in class. To reach this goal, the following questions have guided this paper:

1. What are the challenges of ESP secretary learner oral proficiency development in LTP-PN in today's education context?
2. Is there any statistical significance between the use of Duolingo and Secretarial Studies ESP learners' oral proficiency improvement?
3. How can Duolingo be efficiently used in the Beninese ESP teaching to supplement traditional courses in order to promote self-directed learning that consistently improves learners' oral communication?

Theoretical Keystones
This section explores a review of literature that specifically hinges on the concept of the definition of mobile learning, the definition of Duolingo, and the applicability of the use of Duolingo in the education field.

Mobile Language Learning
According to Ramírez (2009), mobile learning (M-learning) is the direct offspring of e-learning, which involves any learning supported by electronic devices and resources. M-learning provides students with flexible learning that can augment the classroom experience. M-learning is a process that enables learners to collaborate with their peers and instructors to build knowledge. According to Crompton (2013, p.4), M-learning involves "learning across multiple contexts, such as social and content interactions, by using personal electronic devices".

Duolingo application is available for smartphones or a tablet. Through exercises, divided into skills and lessons, Duolingo teaches grammar and vocabulary which assists learners to get to

an A2 level by having them complete all the required purposely designed tasks. Duolingo also uses spaced repetition, in which its artificial intelligence algorithm detects rehearsal needs. Cavus and Ibrahim (2009) showed that most students that use the app enjoyed it and can learn new words. Duolingo's activities integrate several items and skills including pronunciation, translation, and activities such as matching words and pictures, listening and writing, etc.

These three elements namely, integrated language skills, spaced-out practice, and variety significantly improves communication (Brown, Roediger & McDaniel, 2014, p.46). Duolingo provides instant feedback essential for autonomous learning after each task. Autonomous learning is a *"learning process in which the conceptualization, design, conduct, and evaluation of a learning project are directed by the learner"* (Brookfield, 2009, p.2615). This study, thus, suggests that Duolingo should be used as a complement to augment more classical types of homework rather than substituting the ESP class itself.

Duolingo: Definition of the App
Duolingo is a free app created by Luis Von Ahn and Severin Hacker in November 2011. Its slogan is "Free language education for the world." According to its website, it has more than 30 million registered users. It offers several languages for both English speakers and for non-English speakers.

Different types of activities can be performed by students to develop several skills on Duolingo. Once a skill is selected, the available number of lessons for that particular skill is presented. Each lesson lists up to eight words that will be reviewed. Within the app, completing lessons and being tested for all the lessons related to the selected skills is called "practice" or "strengthening skills". This is done to differentiate it from regular lessons. In the app options, general practice can be chosen to review areas that the program considers have not been practised, rather than just a specific skill. Practicing a particular skill can be done once all the lessons have been completed. In each lesson, there is a symbol that indicates the "strength" of the corresponding skill with a maximum "grade" of 5. At five, the symbol of the skill becomes gold.

Below is a list of the most common activities in each lesson (it may not be comprehensive, since the app is constantly being modified):
- Write a vocabulary word after seeing a picture that represents it.
- Translate a sentence into your native language
- Translate a sentence into the target language.
- Dictation: write a sentence that you hear at normal or slow speeds so as to hear the sentence conveniently.
- Pronouncing a sentence. the app uses a voice recognition algorithm to detect whether your pronunciation is correct.
- Match pairs of words.
- Put scrambled words in order.
- Choose from three sentences in the target language to see which ones fit the most in the native language.

Activities are presented in sequence, and the lesson "extends" itself if you get wrong answers. This is indicated by the strength bar at the top of the lesson. If there are no mistakes, it takes seventeen short activities like the ones described above to complete a lesson. This generally takes between five to ten minutes. This time may vary, however, since new activities are added if you make mistakes.

Duolingo incorporates some gamification elements to motivate and engage learners. Some

examples of this are the lingots which are given as awards when you complete a skill. Also, a weekly leader board is included where you can "compete" against friends to see who has the highest XP, which is a symbol of a flame next to your name with the numbers of days of your streak on the site. The aforementioned strength bar appears when a user is completing a lesson, and this indicate how close they are to finishing it. Although the exercises are quite traditional, these elements make the app more enjoyable,.

Gamification and Language Teaching-learning

Today's education suggests an adaptation to the needs of educated children. From the earlier age in kindergarten to any effective learning contexts, gamification is a factor that enables the free expression of innate talents that shape personality. People learn better when they enjoy the learning process. Like any other adult activity, the ludic process needs to be a well-thought activity, which is necessary and mandatory in the process of education.

Cretu (1999) states that the ludic process contributes to the building of child personality by developing the creative capacity as well as the capacity to progressively solve distinct situations. By solving contradictory situations, the ludic process creates the framework of the real world for effort and throwing aside obstacles. Thus, this contributes to the development of ludic morality and shapes what Piaget (2012) calls *"the cathartic functions".* Hence, the ludic process actively participates in both the genesis of the socio-humane behaviour and in the learning of discipline elements in the context of behavioural expression of the preschoolers and pupils.

Importance of Duolingo in the Beninese Secretarial Studies

Beninese secretarial students hardly speak English. The use of the language in the classroom is restricted to note-taking and the memorization of grammar items and business English course definitions is for the purpose of sitting for written exams. Out of the classrooms in their daily lives, there are barely effective opportunities to use English for communication. Normally, these learners need to be trained in learning situations that reflect the workplace challenges and all that it implies. Since they are meant to interact with people from both French and English-speaking countries, bilingualism is a prime requirement to be integrated with secretarial course design and ESP teachers need to be trained accordingly. Sadly, the current Beninese teaching-learning has disheartened secretarial ESP learners from perceiving and using English as a workplace communication prerequisite.

The ludic aspect of Duolingo prevents seeing learning from a burdensome view and ensures that learning is easier and faster by applying the mastered skills into practical aspects of their future professional life. This process represents a continuum between the classical school and the modern world of a digital generation that increases by daily interaction with digital technologies.

Method

This research paper has been carried out using a mixed-method type of research in two (2) stages. The first step involves data collection from both qualitative and qualitative sources using questionnaires addressed to ESP teachers and learners. The second stage is a quasi-experimental process designed to assess the statistically significant impact of Duolingo on ESP Advanced Secretarial learners' Oral performance. Throughout this section, the target population, the sampling, the instruments, the data collection procedures, and the method of analysis are developed.

Target Population and Sampling

Ten (10) ESP teachers, teaching in LTP-PN, who experienced language learning apps and language labs during the COVID-19 period were purposely sampled to fill in the questionnaire. Forty (40) randomly selected ESP secretarial studies learners, experiencing the challenges related to the current ESP teaching-learning process in LTP-PN, were also investigated. These teachers and learners were able to provide reliable data.

For the experimentation process of data collection, two categories of students were purposely selected. Twenty (20) LTP-PN Secretarial studies ESP learners were randomly selected and received the treatment, that is *"the use of Duolingo for 15 Mn"*, in the first category. They actively corresponded to *"intensive training"* while using Duolingo every day for the three (3) months of the experiment. This category of students served as the Experimental Group (EG). The second group of twenty (20) ESP learners, that is the Control Group (CG), only attended traditional English classes and did not receive any treatment. Both groups have been studying English for at least five (5) years with three (3) hours of English per week.

Research Instruments

The research instruments consist of questionnaires and experimentation.

Questionnaires for Teachers and Learners

Questionnaires were administered to ESP teachers and learners.
- Six (6) questions were addressed to teachers about the use of mobile/computer-assisted language learning apps to improve students' speaking fluency and accuracy.
- Five (5) questions were addressed to learners about their perception and challenges related to the English language learning, especially during the COVID-19 pandemic.

The Experimentation

This instrument statistically assesses the impact of regular use of "Duolingo" as a supplement to traditional English courses for three (3) months on LTC-PN secretarial studies ESP learners' oral communication. For this purpose, the simplified speaking skills assessment grid described in Table 1 below has been used for pre-test and post-test after the treatment. Both EG and CG have been tested and the data collected have been analysed using SPSS 26, which shows the mean, the analysis of variance (one-way ANOVA), and the measure of association.

Student ID: _____   Pre-test □   Post-test □

Table 1. Pre- test and Post-test Oral communication Evaluation Rubric

Rubrics	Criteria	Points	Total
Fluency	a. The speaker speaks confidently and naturally with no distracting hesitations. Ideas flow smoothly.	4	
	b. The speaker hesitates several times but generally seems to know the desired words, even if it is necessary to think about them a bit.	2	
	c. The speaker has many hesitations and great difficulty remembering or selecting words.	1	

Pronunciation	a.	Pronunciation is accurate with correct inflexions, numbers of syllables, and other correct nuances of pronunciation.	4	
	b.	Pronunciation is satisfactory. However, words sometimes have incorrect inflexions or are otherwise sometimes hard to understand.	2	
	c.	Pronunciation is very hard or impossible to understand by a native speaker.	1	
Grammar	a.	The speaker speaks with no more incorrect grammar than a native speaker would.	4	
	b.	The speaker occasionally uses inappropriate verb tenses and/or incorrectly uses parts of speech. However, the speaker can correct grammar without prompts.	2	
	c.	The speaker makes frequent use of inappropriate verb tenses and/or incorrectly constructs sentences or uses parts of speech.	1	
Vocabulary	a.	Vocabulary is sufficient to be understood in most settings and words are used with their correct meaning.	4	
	b.	Vocabulary is moderate, although the speaker sometimes needs help identifying the correct words. There are only occasional problems with the correct meanings of words.	2	
	c.	Vocabulary is very limited and/or incorrect words are often used.	1	
Content	a.	The speaker is knowledgeable about the subject and provides a significant level of details, given the time available.	4	
	b.	The speaker is aware of the subject and attempts to provide relevant ideas about it by providing some details.	2	
	c.	Speaker seems to have little or no understanding of the subject. Statements are superficial or not relevant.	1	
Total				20

Source: Adapted from Marek, M. W., & Wu, W. (2011)

Hypothesis and Variables

At this stage, the main hypothesis states that *'using Duolingo improves oral communication'*. Hence, it involves two variables: the dependant variable is measurable and cannot be manipulated by the researcher while the independent variable can be manipulated by the researcher to have a direct effect on the dependant variable. Here, the independent variable involves the *use of Duolingo* while the dependent variable requires *learners' oral performance*.

To validate the main hypothesis, a null hypothesis and an alternative hypothesis have been formulated. The objective is to reject this null hypothesis using the analysis of variance ANOVA test for statistical significance. Two values are expected and a *p-value* of $\alpha < 0.05$ indicates *Statistical Significance* while the *ETA Squared* value expresses the *Measure of Association*. Thus, the effect size between the independent variable (the treatment) and the dependent variable (learner performance/score) can be assessed. The ETA square also measures the real-life impact of using

Duolingo. The data is analysed using SPSS 26 with the following conditions:

A *Null hypothesis* (H$_o$) and an *Alternative hypothesis* (H$_A$)⁻are formulated. These two hypotheses help to validate the main hypothesis:

1. H$_o$: There is no statistical significance between the *Use of Duolingo* and Learners' *Oral Communication skills development*.
2. H$_A$: There is a statistical significance between the *Use of Duolingo* and ESP learners' *Oral Communication skills development.*
3. H$_A$ is Validated if H$_o$ is rejected. Therefore, the main hypothesis is also validated.

Notion of Significance

The statistical significance and the practical significance have been assessed for the current experimentation. The Statistical significance (Sig) is established for a p-value noted α<0.05. The level of statistical significance is expressed as a p-value between 0 and 1. A *p*-value ≤ 0.05 is statistically significant. It indicates strong evidence against the null hypothesis since there is less than a 5% probability for the null hypothesis to be validated. The practical significance or the real-life significance which expresses the strength of the correlation between the independent variable and the dependent variable is assessed through the *Effect size* expressed in ETA squared value.

Procedures of Data Collection and Methods of Data Analysis

Data was collected from ESP teachers and learners. Ten (10) ESP teachers were interviewed at their weekly pedagogical workshop and they were asked to fill in the questionnaire on the spot as well. This enabled the researcher to collect 100% of the questionnaires. Data obtained from the target population was analysed and processed using Microsoft Excel 2019. The results were presented in figures (charts).

Results and Discussion
Report from Questionnaires
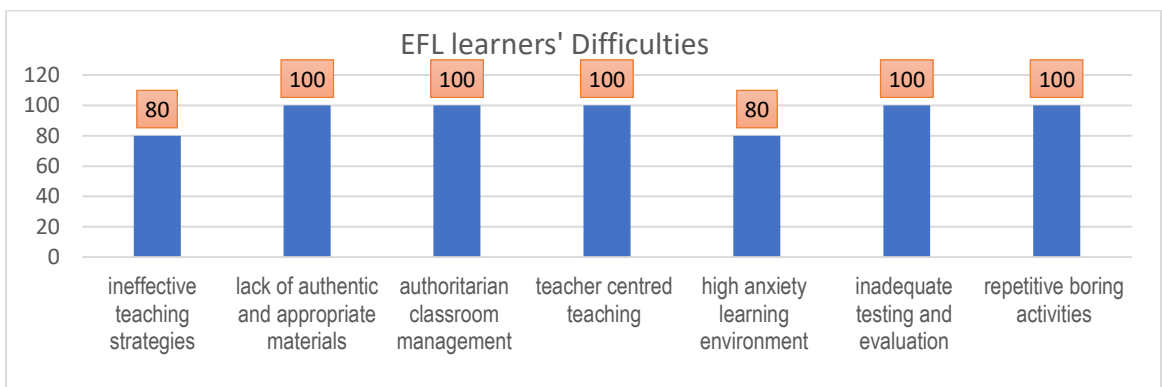### Secretarial ESP Learners' Difficulties

Figure 1. Secretarial ESP learners' Difficulties

In Figure 1, the respondents unanimously deprecate the lack of authentic and appropriate materials, the authoritarian classroom management style in teacher-centred teaching, the inadequate testing and evaluation system, and the repetitive boring class activities. For 80% of the

sample, these impediments and the ineffective teaching strategies generate high anxiety which impedes a communicative learning environment.

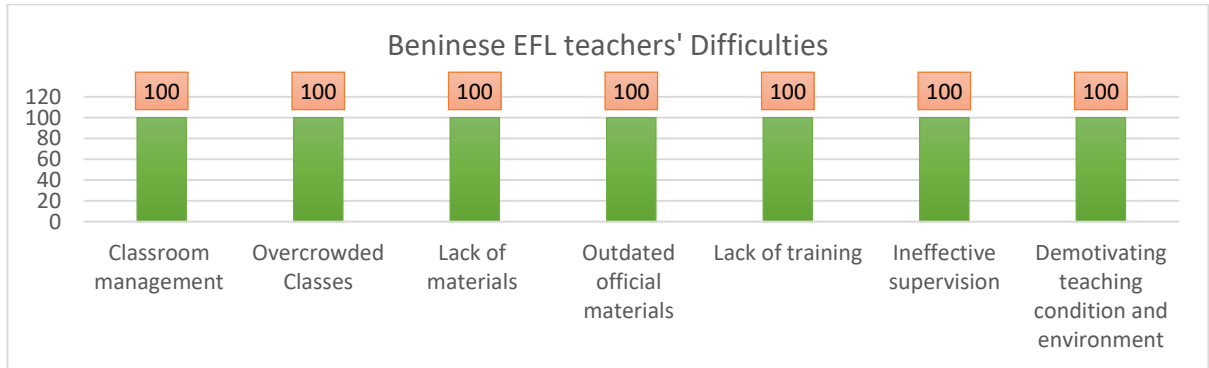**Beninese ESP Teachers Difficulties**

Figure 2. Beninese ESP teachers Difficulties

In Figure 2, all the investigated teachers deprecate overcrowded classes, the lack of teaching materials, the outdated official materials, the lack of training, the ineffective supervision leading to classroom management challenges, and the demotivating teaching condition and environment.

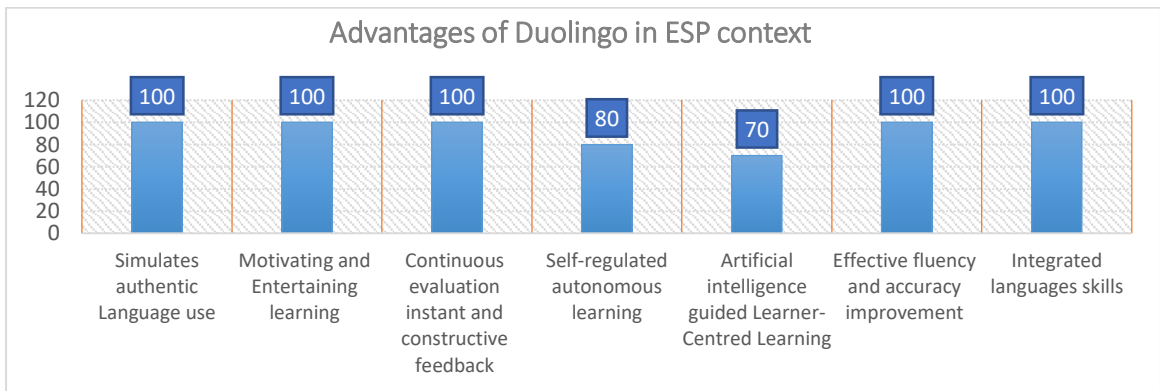**Advantages of Duolingo in ESP Context**

Figure 3. Advantages of Duolingo in ESP Context

Interestingly, for all the respondents in Figure 3, Duolingo simulates authentic language use through motivating and entertaining learning. It also provides continuous evaluation and constructive instant feedback. This allows self-regulated autonomous learning (80%). Furthermore, the respondent consistently acknowledged an effective fluency and accuracy improvement using the app. This is possible because the content of Duolingo uses integrated languages skills development approach with an artificial intelligence guided Learner-Centred Learning (70%).

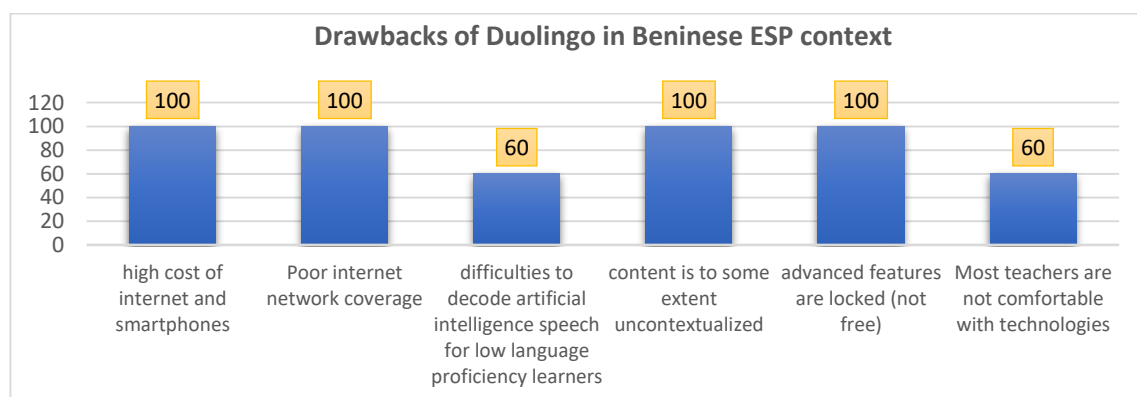**Drawbacks of Duolingo in Beninese ESP Context**

Figure 4. Drawbacks of Duolingo in Beninese ESP Context

Unanimously, in Figure 4, the respondent teachers identify the high cost of internet and good smartphones, as well as the poor internet network coverage to be the main hurdles. More specifically, like most ai-based mobile language learning apps, there are real difficulties to decode artificial intelligence speech for low language proficiency learners in the ESP context (60%) and the content of Duolingo is to some extent uncontextualized (100%). Also, Duolingo is not 100% free because the advanced features are unlocked for the paid version only. Nevertheless, the main barrier to the integration of mobile app as a supplement to the traditional ESP curriculum is that most teachers (60%) are not comfortable with technologies.

The Result of the Experimentation

The experimental group received the treatment that consisted of using Duolingo as a supplement to traditional teaching and the Control Group received no treatment. This analysis is based on the students' scores representing their average in oral communication performance. The data is analysed using SPSS 25 for pre-test and post-test for both groups to assess any significant improvement in oral communication performance that is correlated to the use of Duolingo. The test results are displayed in the following tables:

Oral Communication Pre-test

Table 2. Oral communication Pre-test Report

Report			
Overall Score			
Group	Mean	N	Std. Deviation
Experimental	10.30	20	1.922
Control	10.65	20	2.207
Total	10.48	40	2.050

Table 2 shows that by comparing the mean of both groups, their performances are almost 10.10≈*10.05.* This presages that there is no statistically significant difference between group performance before the treatment.

Table 3. ANOVA Table Oral communication Pre-test Report

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Overall Score * Group	Between Groups	(Combined)	1.225	1	1.225	.286	.596
	Within Groups		162.750	38	4.283		
	Total		163.975	39			

Table 3 details p-value = 226 > 0.05. This shows that there is no statistical difference between groups before the treatment.

Oral Communication Post-test

Table 4. Oral Communication Post-test Report

Report			
Overall Score			
Group	Mean	N	Std. Deviation
Experimental	13.75	20	1.860
Control	11.05	20	2.188
Total	12.40	40	2.426

The experimentation from Table 4 reveals the mean of EG as 13.75 with a standard deviation of 1.860, while CG has a mean of 11.05 with a standard deviation of 2.188. This shows a consistent difference in performance between both groups for the post-test.

Table 5. ANOVA Table Oral Communication Post-test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Overall Score * Group	Between Groups	(Combined)	72.900	1	72.900	17.678	.000
	Within Groups		156.700	38	4.124		
	Total		229.600	39			

In Table 5, the analysis of variance ANOVA shows that there is a statistical significance between both groups as *Sig =.000* for a p-value noted p=.000153 < α=0.05 (the significance level). This value thus rejects the Null Hypothesis asserting that no differences (related to the treatment) exist between groups. Consequently, the alternate hypothesis H_A is validated: there is a statistical significance between groups performance related to the treatment.

The practical level of correlation/association between treatment and groups is assessed by the measure of association summarized in Table 6.

*Table 6. Measure of Association Oral Communication of Overall Score * Group*

Measures of Association

	Eta	Eta Squared

Overall Score * Group	.563	.318

The measure of association in Table 6 reveals that the Eta squared value expressing the Effect size is ES= .318. This indicates a strong correlation between the dependent variable (learners overall score) and the independent variable (use of Duolingo). Therefore, 31.8% of the improvement of learners' performance can be attributed to the impact of the use of Duolingo.

Discussion
The Challenges of Beninese ESP Teaching-Learning in Today's Education Context
During this investigation, 80% of the Secretarial studies learners denounce the ineffective teaching strategies while all of them deprecate the lack of authentic and appropriate materials. They also complain about the authoritarian classroom management style and the fact that learning is still teacher-centred method despite the implementation of the CBA which is supposed to implement a learner-centred approach. Beninese teachers hardly create conducive classrooms. The education system and teacher training do not empower the teacher to match today's education requirements. Most teachers rely on their own and use the available official yet outdated documents to get their job done and avoid any blame for the supervisory staff.

The problem with the educational system is the inconsistent implementation of current teaching-learning approach due to the lack of effective support in terms of facilities requirement, teacher training, and material production. More so, after more than two (2) decades of the implementation of official documents for students' book, teachers' guides and programmes have neither been improved nor updated. This results in boring irrelevant class activities and ineffective teaching strategies.

The main hurdle in the Secretarial field is the evaluation system that negatively impacts both teachers and learners' performance. Essentially, the performance of ESP teachers is measured through the curriculum coverage, the availability of the lesson plan sheet (not its smart execution), the formal implementation of the CBA teaching strategies (group work, collective work, pair work and individual work), the use of the board, etc. Patently, only the superficial aspect of the teaching-learning process is assessed. Learners on the other hand are assessed through written evaluations during formative and summative assessments. Their oral communication competence is not effectually taken into account. Hence, learners attend English Classes to get good marks and pass exams. This is why they justifiably complain about the inadequate testing and evaluation system and the repetitive boring class activities. In addition to this, the lack of facilities resulting in overcrowded classrooms teachers generate high anxiety and a non-communicative learning environment.

The Impact of the Use of Duolingo on ESP learners Oral Proficiency Improvement
The results of the experimentation reveal that by comparing the performance of both groups before the treatment (the use of Duolingo), there was no significant difference between groups. After the use of Duolingo for 3 months, a consistent improvement of the Experimental Group oral performance (mean=13.75) over the Control Group (mean=11.05) was recorded. The analysis of variance (ANOVA) in Table 5 displays a p-value $p=.000153 < \alpha=0.05$ (the significance level). This value demonstrated that there is a statistical significance between groups performance correlated to the use of Duolingo. The practical level of correlation/association between the use of Duolingo and the learners' oral communication, which is assessed by the measure of association in Table 6

with the Eta squared value of ES= .318, shows a strong correlation between the dependent variable (learners overall score) and the independent variable (use of Duolingo). This means that 31.8 % of the improvement of learners' performance in oral communication can be credited to the impact of the use of Duolingo. The present result corroborates the respondents' unanimous acknowledgement of the effectiveness of Duolingo in fluency and accuracy improvement.

Such an improvement is possible because Duolingo simulates authentic language use through motivating and entertaining activities. It also provides continuous evaluation and constructive instant feedback. Unlike the traditional classroom, this allows self-regulated autonomous learning. In addition, the content of Duolingo uses integrated languages skills development approach with an artificial intelligence guided Learner-Centred Learning. With Duolingo, learners discovered ludic learning. Duolingo further sparks learners' pleasure to use a mobile phone. This makes them spend hours in a game like learning while developing real-life communicative competencies from the basics of face-to-face communication routines to more complex professional language. According to Cîrceie (2015, p.456),

> *"The ludic electronic process can take place beyond the limits of time and space. It occurs according to the orientation regarding the child personality development, and implicitly according to the permanent learning, enlarging the flexibility of thinking by children, their individualization and the complementary role of non-formal learning".*

This means that electronic games like the aspect of Duolingo effectively leads to the decrease of the traditional status quo in ESP classes and increases flexibility and efficiency. In today's education learning, playing should be a core feature of any effective curriculum. According to Cretu (1999), Games firstly shape the psycho-physiological functions of the sensorial, movement, and intellectual. It further supports conceptualisation and abstraction, memory, and movement. Games also enable the knowledge of certain life environments, namely school, agriculture, crafts, and industries.

Integrating Duolingo in the Beninese ESP Classes

The use of Duolingo in the Beninese context is subject to substantial challenges. The respondent teachers identify the high cost of the internet and good smartphones, the poor internet network coverage, and the fact that Duolingo is not 100% free since the advanced features are unlocked for the paid version only. More specifically, even if Duolingo is effective in oral communication skills development like most ai-based mobile language learning apps, there are real difficulties to decoding artificial intelligence speech for low language proficiency learners. Also, the content of Duolingo is to some extent uncontextualized for Beninese learners.

Discernibly, M-learning apps are not meant to replace teachers in ESP classes. Thus, they should rather be used as supplements to traditional teaching-learning. For example, teachers can give learners assignments to monitor their evolution while using the apps themselves according to learners' level. The teacher can check the effective use of the app by giving assignments that simulate the skills development activities within Duolingo. All this should be done as a homework assignment because mobile devices are still not authorised in Beninese ESP classes. The teachers' role is to guide learners through the app, thus targeting the specific skills needed to be developed. He/she has to make sure there is a minimum yet consistent use of the apps over a given period. Nevertheless, learners use of the app should neither be restricted nor controlled by the teachers. This means that the ESP learners' autonomy should be preserved.

One of the main barriers to the integration of mobile app as a supplement to the traditional ESP curriculum is that most teachers (60%) are not comfortable with technologies. Any improvement in language teaching/learning requires appropriate training of the education stakeholders. However, English Language teachers should not wait for official training from the ineffective supervision staff. They have to invest in their professional development by grabbing any opportunity to get trained. An effective way to do so is to get familiar with technologies through digital literacy training. This will allow them to access the unlimited resources available online and enrol in online courses, attend webinars, and most importantly familiarise themselves with language learning apps such as Duolingo.

Duolingo app can also improve ESP teachers' language proficiency and improve their performance which will have a positive impact on their learners

Conclusion

This study sheds light on the challenges of the Beninese ESP teaching-learning process in the context of the COVID-19 pandemic with its protective measures that have negatively impacted classroom practice. This raises the international community awareness of the importance of technologies, distance learning and M-learning, especially in a foreign language context. Therefore, an experimental mixed methodology proves that there is a significant improvement in oral proficiency credited to the use of Duolingo after 3 months. The effectiveness of Duolingo is attributed to the fact that it unifies learning and gaming providing an autonomous relaxed and entertaining learning environment unlike the traditional classroom teaching and stressed ambience. Nonetheless, the objective of using Duolingo is not to replace the traditional language courses but to supplement it so as to create a bridge between the classroom and the real world. This in turn will artificially yet consistently increase ESP learners' language exposure. The result of this paper suggests that integrating M-learning apps in the official language course requires specific training for ESP teachers in digital literacy in order to get familiar with technologies and M-learning apps. Doing this will enable them to take advantage of the unlimited resources available online to positively impact their professional life.

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