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# Integrating AI to Beninese ESP learners' curriculum: A technical school-based study

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Abstract: This study evaluates the effectiveness of AI-based language learning apps (LLAs) in enhancing the oral communicative competence of secretarial English for Specific Purposes (ESP) learners in Benin. A mixed-methods design was employed at the Porto-Novo Technical and Vocational High School, where data were collected from 60 secretarial students and 10 ESP teachers using structured questionnaires and classroom observations across traditional and AI-enhanced lessons. Quantitative data were analyzed via descriptive statistics, and qualitative data were thematically coded. The results reveal that learners face significant barriers, including a lack of authentic materials, teachercentered pedagogy, and high anxiety (80%). The study demonstrates that AI-LLAs significantly improved learning outcomes by 85% (post-test mean = 261.67 vs. pre-test mean = 203.33), particularly in fluency, accuracy, and task performance, benefits attributed to personalized feedback and gamification. However, challenges for effective implementation include poor internet access, uncontextualized content, and teachers' digital literacy gaps. The research concludes that AI-LLAs are powerful supplements to traditional ESP instruction when integrated thoughtfully, with practical implications recommending hybrid implementation, offline app features, teacher training, and contextualized content design to ensure equitable access and pedagogical alignment.

Keywords: Communicative skills, Language learning apps, Secretarial learners.

#### 1. Introduction

The institutional framework of educational innovation necessitates changes in educational programs, aligning with the global trend towards modernization and growth in education. By integrating cutting-edge digital technologies and educational trends, institutions across several nations have reformed their curricula to adopt the latest methods, aiming to enhance student learning performance without adding undue burdens [1]. In this context, educational innovation has generated a "digital trend," moving away from traditional teaching methods, such as blackboards and projectors, to utilize computers, smartphones, and other mobile devices in "smart classrooms" [2]. This shift exposes students to a diversity of learning approaches and digital media technologies, nurturing inquisitiveness and engagement, particularly through game-oriented tools.

Unfortunately, the Beninese educational system is still lagging. Secretarial students of Porto Novo Technical and Vocational High School (LTP-PN) typically exhibit low levels of oral communication proficiency. This issue is attributed to several factors, including inappropriate teaching strategies in English for Specific Purposes (ESP) classrooms, fear of making mistakes, insufficient language teaching resources, and limited practice opportunities [3, 4]. Technology can help overcome these challenges, particularly in settings with limited administrative capacity [5]. AI-language learning apps (AI-LLA) have emerged as powerful tools in addressing these challenges. These apps utilize artificial intelligence to offer personalized learning experiences, adaptive learning paths, and instant feedback, thus enhancing language acquisition and communication skills. AI can analyze learners' strengths and weaknesses, tailoring exercises to address individual needs and promoting effective learning outcomes [6].

While the potential benefits of AI-LLA are clear, their impact on the communicative skills of secretarial learners requires further investigation. This study aims to evaluate, through empirical evidence, the effectiveness of AI-based language learning on vocabulary acquisition, grammatical accuracy, communication confidence, and the ability to handle complex linguistic tasks typical of secretarial roles. By examining these impacts, the research seeks to provide insights that can enhance educational practices and professional development strategies, informing the design of more effective language learning programs for secretarial roles in various organizational contexts [7]. The study will explore the following research questions: (1) What are the challenges faced by secretarial learners in developing oral communication skills? (2) How do AI-based language learning apps contribute to the development of communicative skills in secretarial learners? (3) How can AI-based language learning apps be integrated into secretarial courses to address existing challenges effectively?

This study is significant as it explores how AI-based language learning apps can address the persistent challenges secretarial learners face in developing oral communication skills. By enhancing vocabulary, grammatical accuracy, and speaking confidence, these tools can modernize ESP instruction and better prepare students for professional roles. The article is structured into six sections: Introduction, Literature Review, Methodology, Findings, Discussion, and Conclusion, each contributing to a comprehensive understanding of AI integration in ESP learning.

#### 2. Literature Review

This section explores key literature on English for Specific Purposes (ESP), the challenges of developing communicative skills, and the growing role of AI-based language learning apps. It also highlights their relevance and potential integration into secretarial studies in the Beninese context.

#### 2.1. English for Specific Purposes (ESP)

English for Specific Purposes (ESP) has evolved to meet the language needs of learners in specialized academic and professional domains [8]. A crucial element in ESP course design is 'needs analysis', which identifies learners' linguistic gaps and informs pedagogical decisions [9]. Outcome-based assessment ensures that instruction aligns with professional expectations. In a globalized world, ESP curricula must also reflect learners' sociocultural contexts and occupational goals.

Despite a focus on workplace and higher education settings, there is limited research on ESP materials development [10]. Teachers often rely on past experiences in curriculum planning, highlighting the importance of informed needs analysis. Transitioning from general English to ESP requires students to master key terminology and genre-specific language practices.

While existing ESP coursebooks may offer structure, they are frequently outdated or misaligned with learners' practical needs. Authentic, current materials should be integrated to enhance learner engagement. Even without domain expertise, ESP instructors can leverage real-world examples to boost learner motivation. Technology integration and the development of critical thinking skills further enhance ESP instruction. For example, research has highlighted specific vocabulary demands in disciplines like medicine [11] and computer science [12], enabling teachers to tailor lessons accordingly.

# 2.2. Challenges in Developing Communicative Skills in ESP

Teaching English for Specific Purposes presents distinct challenges, particularly in under-resourced contexts. Teachers often lack adequate tools and face difficulties adapting materials to rapidly evolving specialized fields. Learners frequently express low motivation, often due to a limited understanding of English's relevance. Dou [13] notes that ESP teaching must integrate specialized English skills and cross-cultural communication abilities, emphasizing inclusive curriculum design and targeted strategies.

Teachers are thus tasked with fostering learners' appreciation for English and supporting self-awareness. As Panadero [14] emphasizes, instructors help students identify specific learning difficulties (e.g., in complex grammar), develop data-informed self-regulatory strategies (e.g., self-correction

protocols), and enhance ownership of progress through reflective practices. Accordingly, curriculum customization becomes essential. Asrifan et al. [15] argue that curricula must directly reflect learners' real-world communicative demands, often achieved using AI-driven platforms to align instruction with individual needs and authentic target contexts.

A persistent issue is the scarcity of specialized vocabulary, which impedes the creation of field-specific instructional materials and exposes learners to challenges in comprehending technical discourse [16]. As Nekrasova-Beker et al. [17] explain, ESP teachers must stay informed about evolving disciplinary discourse to maintain instructional relevance and align with learners' proficiency needs. Additionally, assessment remains challenging due to the complex interplay between general language skills and domain-specific competencies, compounded by issues like washback effects and the need for authentic, task-based evaluations [18]. These hurdles underscore the importance of dynamic, learning-oriented assessments that prioritize functional language use over rote testing [19].

## 2.3. AI-Based Language Learning Apps

AI-powered language learning apps have emerged as flexible tools for personalized, mobile-based instruction. Warschauer and Xu [20] demonstrate that these apps simulate real-life interactions, generate tailored learning materials, and provide feedback in real time. Platforms such as Duolingo, Babbel, and Rosetta Stone use adaptive algorithms, gamification, and multimedia content to enhance learner engagement and retention. These tools support language acquisition through spaced repetition, progress tracking, and content adaptation based on learner performance features, particularly useful in low-resource contexts where teacher guidance is limited.

Despite their advantages, AI apps present limitations. Most notably, they lack the interpersonal depth of human interaction, including cultural nuance and emotional expression [21]. Learners risk over-reliance on structured input, potentially weakening critical thinking and creative language use [22]. The digital divide also persists, excluding learners without adequate technology or internet access. Privacy concerns around data collection remain unresolved.

#### 2.4. Relevance to Beninese Secretarial Education

Beninese secretarial students require multilingual proficiency for global communication. AI-based apps offer an affordable and accessible supplement to ESP instruction. Their features, adaptive learning, vocabulary scaffolding, and structured skill-building, are especially relevant to secretarial training. Nevertheless, integration must be context-sensitive, considering language background, technological infrastructure, and pedagogical goals.

AI language apps can encourage learner autonomy, facilitate independent practice, and extend learning beyond classroom boundaries. Zhang et al. [23] affirm that mobile games serve as a powerful tool for formal and informal language learning, enabling spontaneous practice in diverse contexts and creating sustained opportunities for immersion and repetition across settings. Teachers can enhance this integration through the following strategies:

- Scenario-Based Learning: Use simulations of real-world secretarial tasks (e.g., meeting planning, email writing).
- Vocabulary Drills: Apply gamified apps like Memrise to reinforce professional terminology.
- Collaborative Tasks: Leverage app-based features for peer role-playing and problem-solving.
- Multimodal Lessons: Blend app listening exercises with in-class speaking practice.

Contextualization is essential, especially for French-speaking learners. Exercises that contrast English and French grammar and vocabulary can help address common transfer errors and support comprehension.

Given socioeconomic constraints in Benin, equitable access to digital tools is a priority. Ally et al. [24] recommend hybrid models to mitigate inequality. Strategies include:

• *Offline Use*: Employ apps with downloadable content.

- Shared Devices: Facilitate group work using school-owned tablets or computers.
- Blended Learning: Combine app-based instruction with traditional methods.
- Fostering Lifelong Learning: Encourage collaboration and independent exploration to support sustained language development.

By addressing these challenges, AI-based tools can meaningfully enhance ESP education in Benin's technical schools' contexts.

# 3. Methodology

#### 3.1. Research Design

This study employed a mixed-methods research design, integrating both quantitative and qualitative approaches to provide a comprehensive understanding of the research problem. The quantitative aspect helped to measure participants' perceptions and experiences using structured questionnaires, while the qualitative component, mainly through classroom observations, captured the practical realities of ESP instruction and students' engagement with language learning technologies. The use of mixed methods was motivated by the complexity of the educational setting and the need to triangulate findings from different data sources to enhance the study's validity and depth [25].

# 3.2. Sampling

The study was conducted at Porto-Novo Technical and Vocational High School, a public technical secondary school in Benin. The institution offers professional training, including secretarial studies, making it an ideal setting for investigating the application of AI tools in ESP instruction. A *purposive sampling* strategy was used to select participants. The sample included 10 ESP teachers and 60 secretarial students, chosen based on their direct involvement with English language learning and the potential use of digital learning tools.

**Table 1.** Sampled Population.

Institution	Teachers	Students
Porto-Novo Technical and Vocational High School	10	60

This sample size was deemed sufficient to provide reliable data while remaining manageable for indepth classroom observations.

#### 3.3. Research Instruments

Through this investigation, the questionnaire is used to collect quantitative data, whereas classroom observation is used to collect qualitative data. To have a clear understanding of this investigation, it is worth describing each of these instruments.

#### 3.3.1. Classroom Observation

With the permission of the school authorities, classroom observations were conducted at Porto-Novo Technical and Vocational High School. These observations provided an opportunity to witness firsthand the teaching and learning processes, as well as the extent of student involvement. The primary aim was to examine teaching methodologies, learner engagement, and the overall classroom environment. This observational data served to validate and cross-check findings obtained from other research instruments.

To ensure consistency and objectivity in data collection, an observation grid table 2 was developed and used during each classroom visit.

Table 2. Class observation grid.

Assessment Area	Specific Criteria	Scoring	Scale
1. Interaction	- Student Participation: Frequency and quality of contributions in	Total:	100 pts
	activities. 40 pts	0-40:	Poor
	- Peer Collaboration: Effectiveness of teamwork. 30 pts	41-70:	Average
	- Teacher Responsiveness: Effectiveness of responses to student	71-100:	Excellent
	questions and needs. 30 pts		
2. Engagement	- On-Task Behavior: Level of focus and concentration during learning	Total:	100 pts
	activities.	0-40:	Poor
	- Completion Rate: Percentage of tasks and homework completed.	41-70:	Average
	- Enthusiasm: Observable interest and enthusiasm for the subject.	71-100:	Excellent
3. Outcomes	- Assessment Performance: Average scores on quizzes, exams, and	Total:	100 pts
	formal assessments.	0-40:	Poor
	- Skill Acquisition: Mastery of skills or competencies taught.	41-70:	Average
	- Project Quality: Creativity and quality of final projects or portfolios.	71-100:	Excellent

#### 3.3.2. Questionnaires

Two distinct types of questionnaires were designed and administered, one tailored for teachers and another for learners, to capture insights from both perspectives on the use of language learning applications in ESP instruction.

#### 3.3.2.1. Teachers' Questionnaire

The teacher questionnaire consisted of seven (7) items. These were designed to gather information on teaching experience in ESP contexts, the challenges faced during ESP instruction, perceptions of language learning apps, the perceived advantages of integrating such apps in language teaching, and the limitations or drawbacks of these tools. The final two questions focused on teachers' willingness to integrate AI-based tools and their views on institutional support for such innovations.

#### 3.3.2.2. Learners' Questionnaire

The learner questionnaire comprised six (6) questions, combining both closed-ended and openended formats. The items aimed to explore learners' needs and expectations in English, the major challenges faced in learning English, their self-assessed improvement in speaking skills after using language apps, the participation levels in app-enhanced collaborative activities, the frequency of language app usage, and suggestions for improving language learning using mobile tools.

These questionnaires provided structured data on both users' experiences and expectations regarding the integration of AI-based language learning solutions.

## 3.4. Data Collection Procedures

The data collection process began with the selection of Porto-Novo Technical and Vocational High School as the research site. After securing administrative permission, questionnaires were administered to the selected sample of 10 teachers and 60 secretarial students. The students completed the questionnaires in the classroom, under supervision, and returned them immediately, ensuring a high response rate and reliability of data. The teachers were also provided with ample time to respond, with follow-ups to ensure completion.

Additionally, classroom observations were conducted over multiple sessions. These observations provided firsthand insight into teaching practices, student engagement, and the integration of digital or AI tools into classroom activities. Observational data helped contextualize and support the questionnaire findings. Preliminary analysis indicated that the majority of participants believed that language learning apps could support the development of their communicative competencies.

#### 3.5. Data Analysis

The collected data were systematically organized, coded, and analyzed. Quantitative data from the questionnaires were input into Microsoft Excel and analyzed using basic statistical tools to generate frequencies, percentages, and comparative figures. Qualitative data from open-ended responses and classroom observations were categorized thematically to highlight recurring trends and perceptions. Tables and charts were used to illustrate key findings, while descriptive statistics supported interpretation. The analysis aimed to triangulate data from multiple sources to strengthen the study's reliability and draw meaningful conclusions.

# 4. Findings

This section encompasses the presentation of the results from the instruments and the discussion of the outcomes.

## 4.1. Presentation of the Results

The data collected from the questionnaire and the class observations are presented below.

#### 4.1.1. Results of Questionnaire.

This part concerns all the information gathered from teachers in the field of this study.

# • Training in ESP

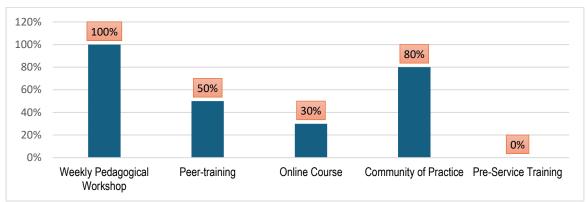


Figure 1.
Type of Training in ESP.

Figure 1 is about the type of training in ESP. It shows that one hundred percent (100%) of ESP teachers attend the Weekly Pedagogical Workshop, fifty percent (50%) are trained through peer training, and thirty percent (30%) participate in online courses. Eighty percent are trained by a community of practice, whereas none of them participate in pre-service training.

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#### 4.1.1.1. Challenges of ESP Teachers

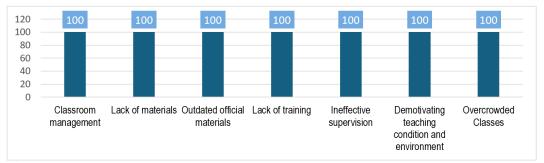
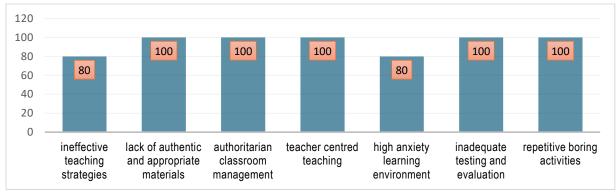


Figure 2. Challenges of ESP Teachers.

Figure 2 discusses the challenges faced by ESP teachers. It is observed that all the investigated teachers criticize overcrowded classes, the lack of teaching materials, outdated official materials, insufficient training, ineffective supervision leading to classroom management issues, and demotivating teaching conditions and environment.

## 4.1.1.2. Secretarial ESP Learners' Challenges



**Figure 3.** Secretarial ESP Learners' Challenges.

In Figure 3, 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 eighty percent (80%) of the sample, these impediments and the ineffective teaching strategies generate high anxiety, which impedes a communicative learning environment.

# 4.1.1.3. Learners' Needs in Learning English

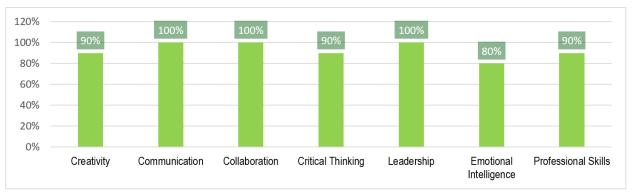


Figure 4. Learners' Needs in Learning English.

Figure 4 discloses that one hundred percent (100%) of students learned English for communication, collaboration, and leadership. Ninety percent (90%) learned for creativity, critical thinking, and professional skills, whereas eighty percent (80%) learned for emotional intelligence.

## 4.1.1.4. Advantages of AI-LLA in ESP Context

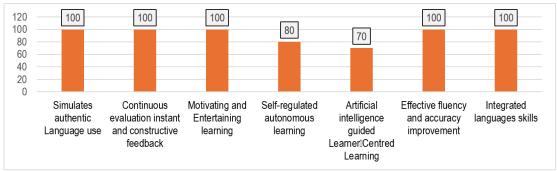
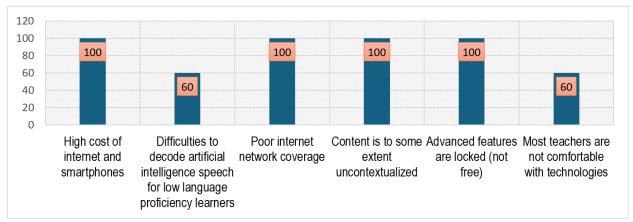


Figure 5.
Advantages of LLA in ESP Context.

Interestingly, for all the respondents in Figure 5, LLA 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 respondents consistently acknowledged effective fluency and accuracy improvement using the app. This is possible because the content of Duolingo uses an integrated language skills development approach with artificial intelligence-guided Learner-Centred Learning (70%).

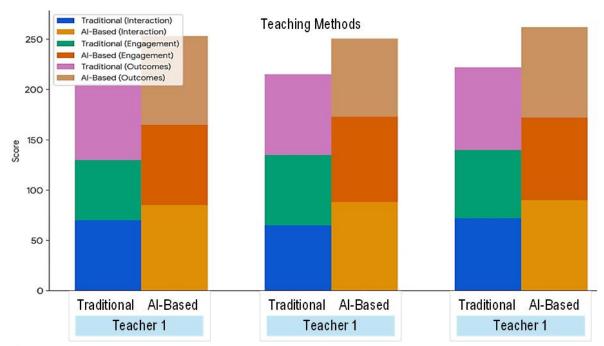
# 4.1.1.5. Drawbacks of LLA in ESP Context



**Figure 6.** Drawbacks of LLA in ESP Context.

Figure 6 shows the drawbacks of LLA in the ESP context. The respondent teachers identify the high cost of internet and good smartphones, as well as poor internet network coverage, as the main hurdles. More specifically, like most AI-based mobile language learning apps, there are real difficulties in decoding artificial intelligence speech for low language proficiency learners in the ESP context (60%), and the content of LLA is, to some extent, uncontextualized. In your methodology, the data is presented as mean scores for each metric across the three observations, providing a clear statistical overview.

#### 4.1.1.6. Traditional vs AI-Based ESP Classes



**Figure 7.**Compared the performance between Traditional and AI-Based ESP Classes.

Based on a closer inspection of the data, here is a more detailed statistical analysis of the chart. The core takeaway is that the AI-based method consistently and significantly boosts learning outcomes, but its effect on other metrics is more nuanced and varies by teacher.

Descriptive Statistics for Total Scores

Teaching Method	Mean Score	Median Score	Standard Deviation
Traditional	203.33	220.0	33.29
AI-Based	261.67	265.0	5.77

The AI-based method has a significantly higher mean total score (261.67) compared to the traditional method (203.33). The lower standard deviation for the AI-based method suggests that the total scores are more consistent across the three teachers.

**Table 4.**Average Scores by Category

Category	Average Traditional Score	Average AI-Based Score	Percentage Increase (AI-Based over Traditional)
Interaction	70.0	75.0	+7.14%
Engagement	65.0	60.0	-7.69%
Outcomes	68.33	126.67	+85.37%
Total Score	203.33	261.67	+28.69%

The average scores by category breakdown show where the primary gains of the AI-based method are. While *Interaction* shows a modest increase and *Engagement* actually decreases, the *Outcomes* category demonstrates a dramatic improvement, with an increase of over 85%. This significant boost in *Outcomes* is the main driver behind the overall 28.69% increase in the total score for the AI-based method.

## 4.2. Qualitative Analysis

The qualitative analysis is based on observations of the teacher's performance during the three sessions. It provides context for the quantitative data and offers insights into the classroom dynamics associated with each method.

The internship at Porto-Novo Technical High School (LT/PN) focused on observing and assessing students' language skills, with the aim of understanding both their abilities and the classroom conditions. Adopting a non-interventionist approach, students were allowed to engage naturally, offering an authentic perspective on their learning challenges. This method revealed notable differences in students' oral and written expression, with confidence playing a critical role in performance. For example, some students demonstrated strong grammatical skills but lacked confidence in speaking.

Classes employed both Language Learning Approaches (LLA) and traditional methods, with observations showing distinct variations in the effectiveness of these approaches. Lessons were generally well-structured, with teachers reviewing previous material and ensuring comprehension through exercises tied to current topics. Despite this, there was limited classroom management and an observed lack of teaching materials. Most classes' disciplined behavior was noted, yet classroom management could be improved.

A significant positive outcome was the impact of the AI-based method. Quantitative analysis showed a dramatic 85% increase in the mean score for Outcomes, with qualitative observations linking this to the AI's personalized, instant feedback, and adaptive learning modules. AI tools such as Duolingo, Quizlet, and Kahoot proved highly effective at improving tangible skills. The effect on interaction was mixed. While the AI method showed a slight average increase in interaction, a drop in engagement was observed in one instance. This suggests that the AI can shift focus towards individual tasks, requiring the teacher to actively work to maintain a collaborative classroom community.

The teacher's role evolved significantly with the AI-based method, shifting from a primary source of information to a facilitator. They were observed guiding students and troubleshooting technical issues. This role change, however, did not negatively impact interaction scores, demonstrating that the teacher successfully maintained their presence and guidance.

#### 5. Discussion

The discussion hinges on the challenges faced by secretarial ESP learners in oral communication development, the contribution of LLAs to communicative skills, and the integration of LLAs within the context of CBA.

## 5.1. Challenges of Secretarial Learners in Oral Communicative Development

Secretary learners face numerous and intertwined challenges in oral communicative development (Figure 3), which are primarily rooted in systemic issues within the educational environment. The absence of authentic and appropriate materials, coupled with a prevalent authoritarian, teacher-centered classroom management style, often results in ineffective teaching strategies [26]. The lack of a robust testing and evaluation system and the repetitive, unengaging class activities further compound these issues.

A critical finding from the study is that these pedagogical impediments generate high anxiety, a sentiment shared by 80% of the learners. This high anxiety significantly inhibits their participation in language learning. As Alamer and Almulhim [27] argue, anxiety is a significant barrier to language acquisition, and a supportive, constructive learning environment is essential. The absence of such an environment leads to further disengagement and reduces opportunities for students to practice and improve their oral communication. Students reported feeling particularly anxious when asked to perform a speaking task without adequate preparation or when they feared making mistakes in front of their peers and a critical teacher. This finding is also consistent with Nation and Macalister's [28] work, which notes that learners with restricted vocabulary often struggle to articulate ideas clearly, leading to frequent misunderstandings that can further escalate their anxiety.

These student-level challenges are inextricably linked to the difficulties faced by teachers themselves, as highlighted in Figure 2. The primary obstacles for Benin ESP teachers include overcrowded classes, a severe lack of teaching materials, and outdated official curricula. Additionally, the lack of professional training and ineffective supervision leads to classroom management challenges and a demotivating teaching environment [29]. This nexus of challenges means that teachers, despite their best efforts, often struggle to meet the specific needs of ESP students for targeted and practical English language instruction that is directly relevant to their professional goals.

#### 5.2. Contribution of LLA in Communicative Skills

Advanced technologies integrated into LLAs, such as speech recognition and instant feedback, demonstrably enhance language learning. The observations revealed that AI-based tools like Duolingo, Quizlet, and Kahoot were highly effective at improving tangible skills. This directly supports the 85% increase in the mean score for outcomes presented in Table 3. Learners particularly appreciated the ability to practice in a private, non-judgmental environment, which helped them overcome their anxiety. This finding confirms that personalized, technology-driven feedback is a powerful antidote to the fear of failure prevalent in traditional classrooms.

Gamification elements within LLAs, such as points, rewards, and competitive levels, enhance learner engagement. Research by Shortt et al. [30] confirms that gamified learning environments increase motivation, which correlates with better retention and application of language skills. Figure 5 underscores this finding, with 100% of respondents noting improvements in fluency and accuracy due to the motivating nature of LLAs. The integrated approach of Duolingo, using artificial intelligence to guide learner-centered learning, was acknowledged by 70% of the sample.

Social features in LLAs, such as language exchange partnerships and community forums, offer learners opportunities to engage in authentic conversations with native speakers. According to Fathi et al. [31], such interactions foster intercultural communication competence and provide valuable practice in real-life conversational settings. Engaging with a global community of learners helps users develop communicative skills while broadening their understanding of cultural differences and conversational nuances.

#### 5.3. Integration of LLA in the Context of CBA

The integration of LLAs into Competency-Based Assessment (CBA) frameworks can significantly enhance language learning outcomes. LLAs offer personalized learning paths that align with CBA principles, allowing students to progress based on mastery of specific competencies rather than a fixed curriculum [32]. Through diagnostic assessments embedded in these apps, educators can tailor instruction to meet individual learner needs, ensuring a more efficient and targeted learning process.

Continuous feedback, a core feature of most LLAs, aligns perfectly with CBA's emphasis on ongoing assessment and skill mastery. According to Li et al. [33], immediate feedback is crucial for reinforcing learning and helping students correct errors before they become ingrained. This type of real-time feedback is essential for competency-based education, where learners need to demonstrate mastery of language skills before advancing.

Figure 5 illustrates the effectiveness of this approach, with respondents acknowledging that LLAs foster self-regulated learning and allow for continuous evaluation. This aligns with findings from Fathi et al. [34], who argue that formative feedback, when paired with progress tracking, leads to improved learner outcomes in competency-based environments. LLAs also allow for flexible learning, complementing traditional classroom instruction. Learners can engage with language content outside of class, which supports the self-paced nature of CBA. This flexibility has been shown to increase learner autonomy and engagement [35].

Assessing the impact of language learning apps on LTP-PN Secretarial Learners' communicative skills requires a structured approach. Begin by establishing clear learning objectives tailored to their specific needs, such as enhancing professional communication in English. Select apps that align with these objectives, focusing on those that offer modules or content relevant to business communication, vocabulary used in secretarial roles, and practical speaking and writing exercises.

During implementation, conduct baseline assessments to gauge students' initial communicative proficiency. Monitor their app usage and engagement, utilizing formative assessments like quizzes, speaking tasks, and writing assignments to track progress. Collect quantitative data through performance metrics and qualitative feedback through observations and student reflections. Adjust teaching strategies based on assessment outcomes to optimize learning experiences and ensure the apps effectively enhance their communicative skills in real-world professional contexts.

Here are some suggestions to ESP teachers:

- Teachers should use English apps learning to prepare classroom speaking activities.
- They should encourage their students to be exposed to authentic ways of developing speaking skills.
- They should exploit videos and audio from their courses to enhance learners' motivation to speak.
- Teachers should advise their students to communicate in English at all times to improve their proficiency in English vocabulary.

Teachers should guide their students on how to use English learning apps to improve their speaking skills.

#### 6. Conclusion

The research conducted at Porto-Novo Technical High School (LT/PN) demonstrates that while traditional and other language learning approaches provide a foundation for education, they are insufficient to consistently produce high-level outcomes. A significant finding is that the AI-based teaching method is a powerful tool for improving student performance, particularly in boosting tangible learning outcomes.

The quantitative data showed a dramatic 85% increase in the mean score for Outcomes when the AI method was used, a result that stands in stark contrast to the challenges observed with traditional methods, such as a lack of student motivation and confidence. The qualitative analysis confirmed that the AI tools addressed these issues by providing personalized, instant feedback and adaptive learning experiences, which traditional methods struggled to deliver.

The research also highlights a crucial shift in the teacher's role, which evolved from a primary knowledge provider to a facilitator. While this shift was managed successfully, it underscores the need for careful implementation to ensure that AI complements rather than detracts from valuable classroom interaction and engagement. In essence, the AI-based method is not a complete solution on its own but when integrated effectively by a skilled teacher, it becomes a highly impactful tool for enhancing student learning and addressing key educational challenges.

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#### **Institutional Review Board Statement:**

The study complied with the ethical standards of the University of Abomey-Calavi (UAC), Benin. Administrative authorization was obtained from Porto-Novo Technical and Vocational High School (LTP-PN), and informed consent was secured from all participants. Formal IRB approval was not required, as the research involved standard educational practices with minimal risk to participants.

# Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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