Teachers' Practices and Perceptions of Technology and *ChatGPT* in Foreign Language Teaching in Jamaica

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ABSTRACT

Both the Covid-19 pandemic and the emergence of *ChatGPT* have influenced technology integration in teaching and learning. In Jamaica, few studies have examined the impact of *ChatGPT* on students' learning and academic performance; however, no known research has specifically addressed its effects on foreign language (FL) teachers. The purpose of this study, therefore, is to explore evaluate teachers' practices and perceptions of technology and *ChatGPT* in FL teaching in Jamaica. The current study collected data from 28 English, French and Spanish teachers who teach across the primary, secondary, and tertiary levels of the education system. A Google Forms questionnaire, which was circulated via FL teachers' *WhatsApp* groups, was used to collect data over a two-month period through purposive and convenient sampling strategies. The study found that teachers utilize a variety of technological tools to enhance the teaching and learning experience. Findings also indicate that technology and *ChatGPT* present both benefits and challenges to the FL classroom. Furthermore, the study reveals that *ChatGPT* helps teachers to save time and energy; however, teachers must carefully scrutinize the information generated by the chatbot before passing it on to students. The study has implications for teacher training and professional development.

Keywords: ChatGPT, Technology, Foreign Language Education, Social media,Web resources, Jamaica

Introduction

Nowadays, technology and education have become two indivisible and important concepts. The rapid and perpetual advancements in technology have resulted in significant changes in many sectors, including education (Hanımoğlu, 2018). The traditional methods that once defined pedagogical practices are progressively being replaced by creative and innovative teaching and

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learning strategies (Yue, 2024). Across educational levels, educators frequently incorporate technology to enhance students' learning experiences and outcomes, enabling them to actively engage in their learning process and construct knowledge (Thelma et al., 2024). Technology provides enhanced accessibility to personalized learning, including granting access to learners with diverse learning needs with equal opportunities to access learning materials and adapt them to their specific needs (Guerra, 2023). Additionally, technology provides interactive and dynamic learning content and motivation for courses (Elvan & Mutlubaş, 2020).

The novel coronavirus (Covid-19) pandemic in 2020 has created a shift in the use of technology globally. Ferreira and Ferreira (2024) posit that "the fact that educational institutions were forced to find creative ways to deliver classes invariably pushed educators into utilizing the online space for the delivery of courses at the tertiary level" (p. 141). This has led to several previously underutilized and unknown technologies gaining popularity and acceptance in the education sector, including foreign language (FL) education (Çobanoğulları, 2024; Khan & Tufail, 2020; Nuraeni, 2021). Madden et al. (2023) and Madden (2022) found that Jamaican FL teachers incorporated tools such as live interactive worksheets and Kahoot! to create a stimulating and interactive online classroom environment, to motivate and engage students.

Although all public primary and secondary schools, as well as some tertiary programs in Jamaica, have returned to full face-to-face instruction, many FL teachers continue to incorporate technology in the teaching and learning process to enhance learning outcomes. This is further impacted by *ChatGPT* and other artificial intelligence (AI) tools, which are described as "disruptive enhancers in the education sector" (Madden et al., 2024, p. 52). In the Jamaican context, stakeholders in higher education perceive *ChatGPT* as a chatbot that makes academic tasks easier for students and renders educators' work less time consuming, as it assists with lesson planning, assessment designs, and providing feedback (Madden et al., 2024).

Both the Covid-19 pandemic and the emergence of *ChatGPT* have brought significant changes to teachers' practices and pedagogies in education, particularly concerning technology integration (Naidu & Sevnarayan, 2023). However, studies in Jamaica and the wider Anglophone Caribbean remain limited in this regard. Virgo (2024) highlights that the Covid-19 pandemic accelerated the need for digital solutions and emphasized that technology is critical in "changing the educational landscape, enabling access to interactive and self-directed learning across geographic and economic boundaries" (p. 93). Haye et al. (2024) conducted a recent study on *ChatGPT*'s current use by Jamaican students and its impact on their academic performance. However, no known local studies have specifically addressed the views of FL teachers in this regard. Against this backdrop, this research aims to explore Jamaican FL teachers' practices and perceptions of technology and *ChatGPT* to understand the digital tools they use in their teaching, and the benefits, challenges, and concerns associated with *ChatGPT*. Hopefully this study will serve the language science community and be a pioneering resource to guide future practices and research, especially in the local and regional contexts.

Literature review

Evolution of Technology in Foreign Language Education

The integration of technology into foreign language education has transformed the way languages are taught and learned, evolving from rudimentary tools to advanced, AI-driven systems that cater to diverse learning needs. In earlier years, FL pedagogy relied on audiotapes and language labs, which were critical in helping students improve their pronunciation and listening skills. However, Blake and Gullen (2020) noted limitations in these systems, describing them as mechanical and repetitive, as they mainly emphasized rote learning, thereby leaving little room for interactivity or authentic communication.

As the 1980s approached, FL pedagogy experienced a shift towards communicative Computer-Assisted Language Learning (CALL), even though CALL in itself emerged in the 1960s. Communicative CALL introduced interactive and multimedia-based approaches to language learning. During this period, several tools, including *Hot Potatoes*, emerged. These tools allowed educators to design customizable quizzes, facilitating interactive and collaborative lessons for both language and non-language students (Arneil et al., 2001). Chapelle and Sauro (2017) noted that communicative CALL enhanced language practice, providing learners with access to grammar, vocabulary, and conversation practice at their own pace. These innovations fostered language immersion, thus enhancing dynamic and personalized experiences. Later, Technology-Assisted Language Learning (TALL) further diversified the scope of language education by integrating advanced technologies like AI, augmented reality (AR), and machine learning. These advances allowed educators to incorporate tools that customized instruction to individual learner needs and created immersive and contextualized learning environments.

The advent of the World Wide Web in the 1990s further empowered FL education teaching and learning with improved versions of Computer-Mediated Communication (CMC), which is any communicative transaction that transpires by using two or more networked computers. Various forms of CMC exist, such as audio, email, text chat, and video (Yu, 2011). CMC promotes real-time interaction via email, chatrooms, and videoconferencing, and connects learners with native speakers internationally, thus breaking down geographical hurdles. CMC tools resulted in a change from the routine decontextualized language drills to real-life communication, thus leading to linguistic and cultural competence. Livemocha is an example of this approach, combining structured lessons with conversational practice to improve linguistic and cultural understanding.

As we transitioned toward the smartphone era, this gave rise to Mobile-Assisted Language Learning (MALL) – a term coined by Chinnery (2006). MALL has made FL more accessible and flexible with *Duolingo*, *Babbel*, and *Memrise* applications. MALL also supports gamification in mobile-friendly formats. As Villalba (2017) observed, technology through task-based language teaching and learning effectively sustains learner interest both formally and informally, which allows students to achieve high-quality language learning through authentic tasks in a fun way. For instance, *Duolingo* motivates learners through rewards like streaks and badges, while *Babbel* employs speech recognition technology to improve pronunciation. Mobile instant messaging tools like *WhatsApp* have also proved beneficial to MALL (Madden

& Robinson, 2024; Madden & Foucher, 2020). Additionally, tools like Google Translate leverage AI capabilities to translate real-world text, such as menus and signs, fostering practical and contextual language use in the FL classroom.

Although AI dates back to the 1950s, it has recently emerged as a game-changer in FL education. AI-powered tools such as *ChatGPT* have transformed how learners practice language skills, by simulating real-world conversations. AI tools provide instant, adaptive feedback, which helps learners progress in accuracy and fluency in pragmatic situations such as job interviews or travel scenarios. Wang et al. (2024) report on *ChatGPT*'s ability to support students' self-directed learning for writing purposes, while Xu et al. (2023) highlight the chatbot's potential to leverage personalized learning, thus enhancing learners' critical thinking, self-regulated learning, and creativity. Correspondingly, tools like *Grammarly* and *Write & Improve* assist learners to fine-tune their syntax, style, and tone, which develops learner autonomy.

Virtual reality (VR) and augmented reality (AR) technologies have further enriched FL learning by creating immersive environments that imitate real-world circumstances. Platforms such as *MondlyVR* allow learners to engage in situational dialogues, employing functional chunks to request directions or order a meal, in fully interactive virtual spaces. Immersive technologies mimic real-world experiences and boost cultural competence by copying authentic environments (Lafford, 2009). AR tools like *Mondly AR Lessons* go even further, by integrating 3D visualizations with language practice to provide meaningful, contextualized experiences that close the gap between theory and real-life application.

Furthermore, collaborative technologies have also played a central role in FL pedagogy by fostering peer interaction and community learning. Tools like *Padlet*, *Flipgrid*, and *Edmodo* promote group discussions, share multimedia projects, and provide peer feedback. For instance, *Flipgrid* enables learners to record video responses to prompts, encouraging speaking practice and allowing for constructive critique. These technologies support socio-constructivist approaches to learning, which underscore the importance of collaboration and reflection in the learning process.

Moreover, Khazhgaliyeva et al. (2023) highlight the role and effectiveness of internet-based resources in FL learning. These web-based resources encompass multimodal activities and tools such as audios, videos, links, images, exercises to develop all language competences, and applications to enhance the learning experience. Liu et al. (2020) note that these web-based resources are also useful in remote learning situations, while Kuure (2011) draws attention to the social, interactive, and multimodal nature of students' literacy environments, highlighting that multiple resources compete for students' attention once they go online.

In summary, the evolution of technology in FL teaching has demonstrated gradual progression from rote-based methods to dynamic, personalized, and interactive approaches. Modern tools like *ChatGPT*, *Duolingo*, *MondlyVR*, and collaborative platforms have expanded access to language education and enhanced learner autonomy and engagement, cultural competence, and practical application. Given the perpetual nature of technology, their constant innovations are expected to continue to revolutionize FL education and create boundless opportunities for both

teachers and students.

Advantages of Technology in Foreign Language Education

A review of literature highlights numerous advantages of technology integration in FL education, notably concerning students' level of engagement and motivation, as technology makes learning more active and interactive (Thomas & Schneider, 2020). In addition, technological tools allow learners to be exposed to various cultural artefacts and how the language is used in a meaningful sense. Additionally, the incorporation of technology in FL pedagogy supports Task-Based Language Teaching (TBLT), Project-Based Learning and Teaching (PBLT), and Content Language Integrated Learning (CLIL). All of these approaches foster "learning by doing" with real-world scenarios. Consequently, video technologies allow students to engage in tasks that relate to authentic quotidian experiences, such as collaborative work and problem-solving exercises. These are important experiences for specialized language learning contexts, including language for specific purposes (Thomas & Schneider, 2020). Moreover, these technologies provide learners with multimodal input, which can enhance their comprehension and retention of new language forms.

Technology integration in FL pedagogy also provides learners with access. Instructors can use videos and various forms of animations to adapt their lessons to students' learning styles and multiple intelligences at different levels. For example, *Machinima* has comprehensive and adjustable templates that can fit different educational goals. Furthermore, technology incorporation promotes the teaching of Less-commonly Taught Languages (LCTL) and endangered languages (EL) and caters to learners with disabilities to enhance their learning outcomes (Madden et al., 2024; Ward et al., 2024; Thomas & Schneider, 2020). Technology therefore supports inclusion.

Aside from advantages to the students, technology is also advantageous to educators as it gives them new tools for practice. It makes the creative design of the curriculum possible and enhances teachers' growth, especially in CALL. Warschauer and Kern (2000) add that one of the most frequent benefits of technology in the FL classroom is quick access to authentic materials relevant to lesson planning. Lutfi (2015) underscores that teachers can go on the internet and access culturally relevant, contextualized, and up-to-date information in the form of written text, video, or image. This helps instructors to demonstrate to their students, in a practical way, that the target language is being used in an authentic way around the world, which can influence students' motivation to learn the language. Lutfi (2015) also states that technology can provide teachers with a record-keeping tool on the improvement of students' language output. Evidently, technology brings numerous benefits to FL acquisition. Notwithstanding, the success of these tools depends on adequate teacher training and the resolution of challenges such as technological limitations and resource constraints (Thomas & Schneider, 2020). In this way, the decisive movement of these technologies would help solve the cutover problem between old instruction methods and new educational requirements.

Challenges Associated with Technology in Foreign Language Education

A critical issue in the use of technology in FL education is the lack of sufficient institutional backing, as well as resources, especially in some low-income countries. Teachers are generally

unable to acquire newer technologies as they do not have sufficient budgets, or the institutions have other infrastructural needs that take priority. In addition, other technical problems like slow internet connections, old computers, and lack of compatible software do not allow the smooth usage of CALL tools (Lozano & Izquierdo, 2019). These restrictions primarily affect institutions in undeveloped areas, leading to erratic application of technologies across regions (Thomas & Schneider, 2020).

Another important issue is the availability of teacher education, experience in working with CALL, and the criteria they use to select CALL tools in their classes (McMurry et al., 2016). Some FL teachers have insufficient knowledge of how to integrate many types of technologies into their lessons, which leads to the inefficient application of some technology, which, otherwise, could be easily implemented. For example, some teachers wanting to use *Machinima* in their class to produce 3D videos require connection and experience that many do not have. This high requirement and the struggles to meet them may frighten teachers from using emerging technologies in their classes and limit their likely benefits to students (Kessler, 2006; Thomas & Schneider, 2020). Similarly, the absence of adequate digital literacy and technological maneuvering knowledge can be challenging for some students. Some learners, especially the disadvantaged, may not be able to perform some tasks using the CALL tools due to a lack of basic skills or devices. Moreover, students who do not speak the target language fluently may become confused and frustrated by advanced tools and quit trying to engage with them.

Furthermore, the use of technology in FL classrooms also raises the issue of cultural and pedagogical suitability. For example, teaching with video-based technologies or virtual environments may not be appropriate in some places where traditional practices are expected. In addition, contextual, useful and attractive materials that appeal to various students are still a problem. It is important that teachers consider carefully the extent to which they use up-to-date software to avoid overlooking culture-based approaches to teaching (Ziegler, 2016).

Overview of ChatGPT

As technology advances, so does artificial intelligence (AI); however, the history of AI and chatbots dates to the 1950s when they were designed to mimic human conversation (King, 2023). Over time, there have been developments in AI where tools such as the Chat Generative Pre-Trained Transformer (*ChatGPT*) chatbot have been created. *ChatGPT* was released in November 2022 by OpenAI as part of a free research preview, according to Nyst (2024). Since its launch, Shankland (2023) found that its popularity has increased exponentially, with over a million users just days after it was released. This growth continues as more people become familiar with the tool and realize how helpful it is in navigating the difficulties of academia, work, and personal life. At its core, *ChatGPT* is programmed to use deep learning methods to analyze and produce text whilst using vast amounts of data from the internet (Haleem et al., 2022). Iqbal et al. (2022) describe *ChatGPT* as "an AI-driven bot" that "operates using Artificial Intelligence to communicate naturally with the user" (p. 97).

ChatGPT has since been publicly used as a cutting-edge AI chatbot that is able to understand and respond to complex requests in natural and human-like fashion (King, 2023). In fact,

Madden et al. (2024) describe the chatbot as the "more competent non-biological other" that 'thinks' more quickly than the average human (pp. 52-53). Further to this, Zaiarna et al. (2024) highlight its advanced natural language processing capabilities and ability to generate coherent responses and handle various language tasks. In alignment with these capabilities, *ChatGPT* is currently transforming education by enhancing personalized learning experiences, improving accessibility to resources, and enhancing students' understanding of complex concepts and academic performance through AI-driven feedback (Haye et al., 2024).

Benefits of ChatGPT to Foreign Language Teachers

The literature establishes numerous benefits of *ChatGPT* to educators. Peters (cited in the Jamaica Gleaner, 2023) notes that tools such as *ChatGPT* can extend beyond efficiency and engagement. The integration of the tool will allow educators to create personalized learning experiences, promote the development of technical skills, and support an evolution in assessment methods. As for Karataş et al. (2024), *ChatGPT* provides support to teachers in expediting research processes and allowing them to access information more quickly, creating lesson plans, teaching materials, worksheets, and assessments more efficiently (Kohler, 2024). Alsaweed and Aljebreen (2024) solidifies this point, highlighting that the chatbot supports teachers in reducing workload, as it can automatically evaluate students' essays within seconds, allowing teachers more time for other tasks, further underscoring these benefits. Additionally, teachers are able to focus more on teaching and less on administrative tasks, where the tool can automate routine tasks and provide quick feedback (Al-Smadi, 2023). Govindaraja et al. (2024) express that teachers can also benefit from the use of the tool, as it will enhance their teaching practices, thereby creating a more engaging and dynamic learning experience.

ChatGPT proves to be highly effective in the context of FL teaching and assessment. Teachers can use the tool to design various tasks and activities for students, particularly in areas like vocabulary, grammar and writing (Zaiarna et al., 2024). The authors' study involving 36 experienced English language instructors found that they were moderately to highly satisfied with the use of *ChatGPT* for its effectiveness and utility in the classroom (Zaiarna et al., 2024).

Challenges of ChatGPT to Foreign Language Education

One of the repeated challenges of *ChatGPT* in the literature is over-reliance. Pham and Le (2024) state that overdependence on *ChatGPT* could limit students' critical-thinking and creativity skills, while Strobl et al. (2024) and Kasneci et al. (2023) highlight that this excessive reliance can hinder cognitive development, particularly in speaking, listening, and self-monitoring skills, leading to a reduction in learners' ability to engage with language independently. Kasneci et al. (2023) underscore that delegating tasks such as proofreading to AI can impair the development of essential skills like self-editing, and Stockwell (2024) cautions that there is a risk that students may mistake AI-assisted writing for genuine language proficiency, thus undermining their independent writing abilities.

Another downfall of *ChatGPT* concerns quality and accurate feedback. Generative AI like *ChatGPT* provides instant feedback, but its accuracy can be inconsistent, sometimes reinforcing errors or offering incomplete explanations (Bang et al., 2023). The risk of "hallucination," where AI produces fictitious information, further complicates its use in educational settings

(Babl & Babl, 2023; Ali & Djalilian, 2023). Notwithstanding, its ability to assist in simplifying complex topics remains a strength, provided its responses are critically evaluated by both learners and educators (Chaudry & Kazim, 2021). Furthermore, the chatbot poses language biases. *ChatGPT*'s primary focus on English limits its effectiveness for learners of some other languages, including endangered and less commonly taught languages, thus raising concerns about linguistic and conceptual prejudices (Żammit, 2024; Wang & Stockwell, 2023). Moreover, despite its linguistic prowess, *ChatGPT* struggles with cultural nuances and regional dialects (Kohnke et al., 2023). Its inability to fully grasp idiomatic expressions or culturally specific contexts requires careful human oversight (Zheng et al., 2024). As such, AI should be used as a supplement, with teachers guiding learners through cultural and contextual distinctions.

In addition, AI integration in education raises important ethical concerns, specifically regarding data privacy, plagiarism, and academic dishonesty (Chaudry & Kazim, 2021). Misuse of AI tools, such as AI-generated plagiarism, has raised the need for improved detection tools like Turnitin (Kohnke et al., 2023). Besides, as AI tools like *ChatGPT* become more integrated into education, legal questions about ownership and the use of AI-generated content are emerging (Smits & Borghuis, 2022; Elliott & Maccarthaigh, 2024).

In summary, the literature review provides insights into the evolution of technology integration in FL education, highlighting specific tools that have been utilized over the past decades to enhance teaching and learning. CALL, MALL, CMC, and gamification have revolutionized FL instruction, providing both teachers and students benefits. Technology generally shifts from the traditional classroom routine, providing dynamism, increasing students' motivation and creativity, and catering to personalized learning and diverse learning styles. However, some schools lack adequate technological infrastructure, and some teachers and students do not possess the requisite training and digital literacy to exploit technology in the FL classroom, which serves as limitations. Although the literature highlights CALL tools as a broad category, research is limited with respect to specific platforms that FL teachers use, especially in the post-Covid-19 context. Consequently, research is needed to highlight new trends and best practices. Similarly, the evolving nature of technology impacts teachers' perceptions of its incorporation in FL education; therefore, it is important to understand their views as more tools become available. This is particularly important in the Jamaican context, as no recently known study has considered the aforementioned.

Concerning *ChatGPT*, the chatbot presents numerous affordances to FL education, with benefits to both teachers and students. *ChatGPT* acts as a tutor that performs personalized instruction, breaking down complex concepts into understandable units. It also provides ideas for lesson planning and various exercises and lessens teachers' workload. However, numerous teachers and researchers have raised concerns that students may become over reliant on the platform, which can affect critical-thinking skills. Additionally, they underscore their apprehensions regarding the potential for academic dishonesty and plagiarism, as well as inaccuracies that the chatbot may produce. Across the world, numerous studies have assessed *ChatGPT* in various aspects of FL education; however, none has yet been conducted in the Jamaican context, which is a part of Small Island Developing States (SIDS). Consequently, as

both students and teachers are using the chatbot to varying degrees, it is necessary to understand the extent of its usage and its benefits and implications to FL instruction. The study will serve local stakeholders in education, as well as other members of the Caribbean Community (CARICOM), given that the region shares a similar educational landscape and curricula, especially at both the secondary and tertiary levels.

Research Questions

To fulfill the purpose of the study, the following research questions were formulated:

1. What technological tools do Jamaican FL teachers use in their teaching?
2. What are Jamaican FL teachers' perceptions of technology integration and social media inclusion in their teaching?
3. What are Jamaican FL teachers' views and practices of *ChatGPT* in their teaching?

Methodology

Settings and Participants

The study was conducted in Jamaica among FL teachers who teach at different levels of the education system. Jamaica is an Anglophone society with English as its official language of instruction. FLs are mainly taught at the secondary level with Spanish being the dominate one, followed by French. In most secondary schools, an FL is mandatory up to third form, while students may choose to pursue it at a higher level and then prepare to sit the Caribbean Secondary Education Certificate (CSEC) followed by the Caribbean Advanced Proficiency Examination (CAPE), both of which are regional exams offered by the Caribbean Examinations Council (CXC). Purposive and convenience sampling techniques were used to recruit participants for this study who responded to a *Google Forms* questionnaire (see more under Instrument). Participants had to fulfill some basic criteria, such as being employed as an FL teacher in a government-approved school, having at least one year of teaching experience, and being a user of technology in their FL teaching. Twenty-nine (29) teachers responded to the questionnaire with one not consenting to have their data used as part of the study. Therefore, the study's analysis is based solely on the data from the 28 respondents. Majority of the respondents (N=18, 64.3%) were female, while the others (N=10, 35.7%) were male. Both their ages and years of teaching experience span different ranges (see Table 1). Most of the participants (N=21, 75 %) teach at the secondary level, while small numbers teach at the primary (N=4, 14.3%) and tertiary (N=3, 10.7%) levels. In terms of languages taught, the majority (N=25, 89.3%) teach Spanish, while fewer teach French (N=11, 39.3%) and English (N=10, 35.7%).

Table 1.

Summary of Teachers' Demographic Information

Number of participants	29 overall 28 consented
Gender	18 female 10 male
Age range	20-25 (N=3) 26-30 (N=1) 31-35 (N=9) 36-40 (N=4) 41-45 (N=4) 46-50 (N=1) 50 & over (N=6)
Employment	Ministry of Education, Jamaica Different schools and universities
Levels taught	Primary (N=4) Secondary (N=21) Tertiary (N=3)
Languages taught	English (N=10) French (N=11) Spanish (N=23)
Years of teaching experience	1-5 (N=7) 6-10 (N=8) 11-15 (N=5) 16-20 (N=4) 21-25 (N=1) 30 & over (N=3)

Research Design

This study adopted the mixed-methods approach, which, according to Levy (2015) is useful when studying CALL, as it allows researchers to gain a more fulsome picture of participants' experiences and perspectives. Therefore, a mixed-method research design was used to understand FL teachers' practices and perceptions of technology and ChatGPT in their classroom and pedagogical practices. Dawadi et al. (2021) mention that it is beneficial to mix two methods to provide valuable insights into the research phenomena that cannot be comprehensively understood by using only qualitative or quantitative methods. Shorten and Smith (2017) emphasize that mixed-method research supports purposeful data consolidation, which allows researchers to view a phenomenon from different perspectives and research lenses. A *Google Forms* questionnaire was used to collect both quantitative and qualitative data (see section Instrument for more details). Quantitative data were mainly comprised of descriptive-type questions, which were used to identify trends and frequencies within the target population related to availability and usage of technology, as well as practices, benefits, and limitations of ChatGPT. Qualitative data consisted of open-ended questions that expounded on the quantitative ones, in addition to their views of social media inclusion in FL education.

Instrument

A questionnaire was developed to ascertain Jamaican in-service FL teachers' usage of

technology in their teaching and their perceptions of *ChatGPT* for academic purposes. In addition to demographic information, such as age, gender, academic background, and years of experience, it included multiple-choice and open-ended questions to ensure that all the respondents' views were fully captured. The questionnaire sought to determine the different technologies available to teachers, their institutions' attitudes and policies toward technology integration, the technological tools they use in their teaching, their perceptions of the benefits and challenges of integrating technology in the FL classroom, and their views and practices of *ChatGPT*. The questions concerning technologies in school were adopted from Gong and Lai's (2018) study on technology integration in the language classroom, while those related to *ChatGPT* were modeled based on a study conducted by Widianingtyas et al. (2023), who assessed teachers' perceptions of the chatbot in language education, whether it was beneficial or if it posed a threat. Both authors' works were selected as they explored objectives similar to this study. They also had sound methodology, which was enhanced by robust validity and reliability. Given that their instruments effectively captured the intended variables, they were deemed appropriate to guide this study. Subsequently, the questionnaire underwent face validity by some of the researchers (N=4) to assess the relevance, formatting, readability, clarity, and appropriateness of the questions for the target audience. Afterwards, the researchers conducted content validity to determine the extent to which the questionnaire captured all the aspects of the construct that it aimed to investigate (Ranganathan et al., 2024). During this process, the reliability of the questionnaire was checked to reduce redundancy and improve the reliability of individual items. This was done by performing Cronbach Alpha in MAXQDA, which produced a score of 0.78, which means that it was good.

Data Collection and Data analysis

The researchers administered the *Google Forms* questionnaire to FL colleagues between October and December 2024, with the request that they assist in disseminating the link to other local FL teachers in their network. Through this collaborative effort, the authors aimed to increase participation and obtain diverse responses. The questionnaire was primarily circulated through the Jamaica Association of French Teachers (JAFT) and the National Spanish Teachers' Association (ANPE[1]) WhatsApp groups. Quantitative data was analyzed using descriptive statistics, which help to summarize data in the form of simple quantitative measures such as percentages or in the form of visual representations (Kaliyadan & Kulkarni, 2019), while qualitative data from the open-ended questions were analyzed using conventional content analysis (Hsiesh & Shanon, 2018). The study relied on a coding approach outlined by Campbell et al. (2013) to enhance inter-coder reliability. Essentially, the first and second authors initially coded the data using content analysis. The third and fourth authors were then given the data for coding without any prior codes. Both teams meticulously searched through the data to identify recurring patterns and themes to arrive at the most appropriate representations of the responses provided. Subsequently, both teams shared their respective analyses and arrived at consensus in their coding, which was later adopted.

[1] In Spanish: Asociación nacional de profesores de español

Results/Findings

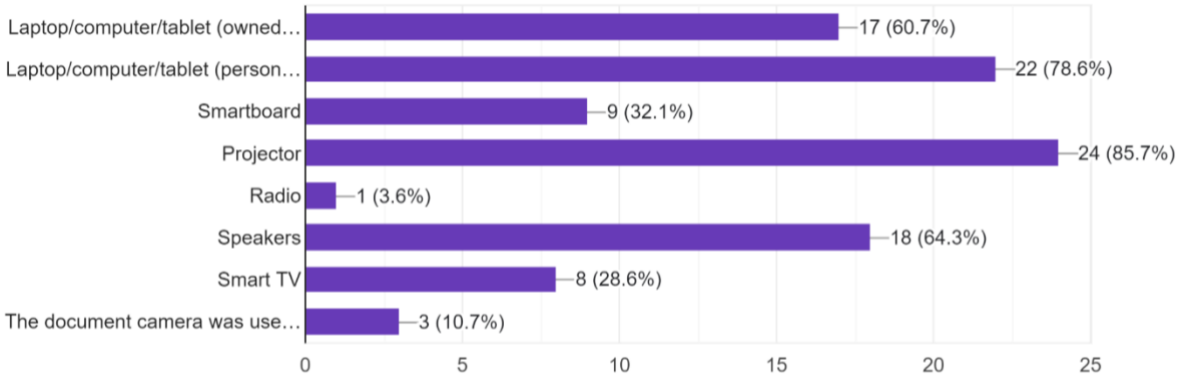
RQ1: RQ1: What technological tools do Jamaican FL teachers use in their teaching?

Technological tools available to foreign language teachers at school

Figure 2 shows that there is a variety of technological tools available to Jamaican FL teachers to assist in their pedagogical practice. According to the responses, 85.7% of teachers have access to a projector, 78.6% have a personal laptop/computer/tablet, 60.7% have access to an institutionalized laptop/computer/tablet, 64.3% can use speakers provided by their schools, while significantly fewer schools have smartboards, smart TVs, and document cameras that teachers can access. Radio is not a prioritized technology in most schools. This is likely because laptops are more commonly used and are multi-faceted.

Figure 2.

Technology available to Jamaican FL teachers at their schools



Technological tools used for pedagogical purposes in foreign language education

Figure 3 summarizes of the technological tools predominantly used by Jamaican FL teachers in their professional practice. The findings reveal that a significant portion of teachers (41%) opt for interactive and assessment-oriented tools. Additionally, creative and multimedia tools are utilized by 19% of teachers, 16% of them incorporate presentation tools, while 10% employ reference and translation tools. Furthermore, a small group of teachers (7%) opts for both general and AI-based tools.

To explain Figure 3, presentation tools include Canva, PowerPoint, and Prezi. Interactive and assessment tools encompass Classtime.com, Ed Puzzle, Jamboard, Jeopardy, Kahoot, Live worksheets, Quizizz, and Wordwall. With regard to reference and translation tools, these speak to language learning applications, different translation sites (Google Translate, DeepL, etc) and Word Reference. Creative and multimedia tools incorporate Adobe Express, Brainscape, and *YouTube* videos. With respect to AI-based tools, *ChatGPT* and text-to-speech applications emerged, while other general tools mentioned include Google Maps and other online materials and links.

Figure 3.

Categories of technological tools used by Jamaican foreign language teachers

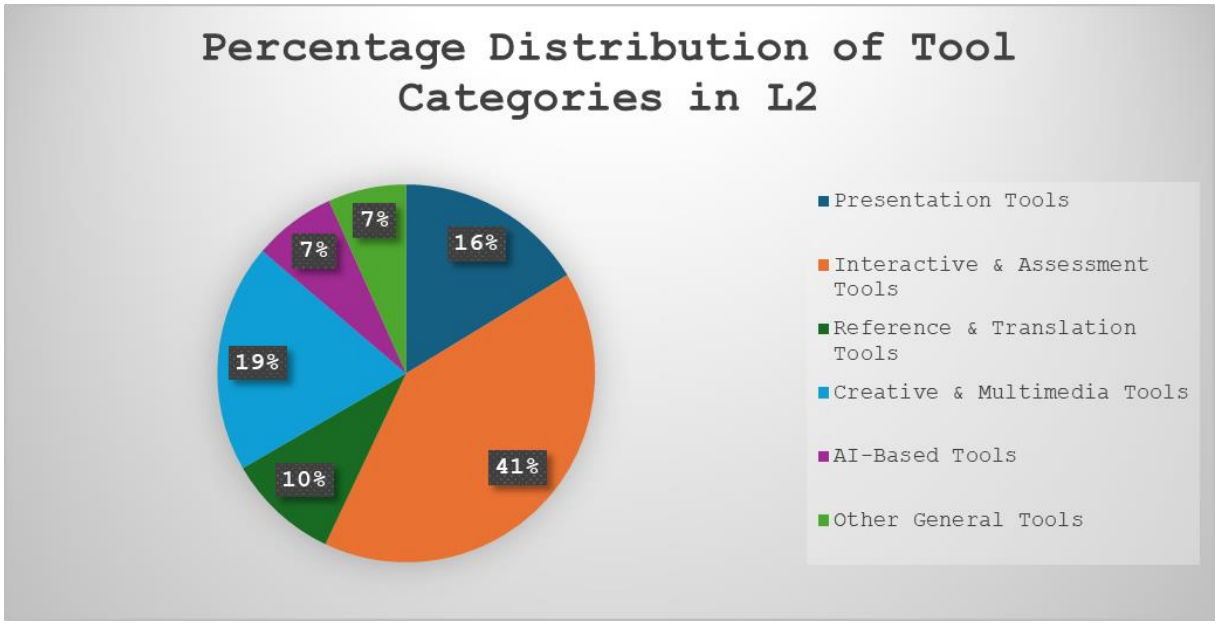


Table 2 below provides granular insights into the technological tools used for pedagogical purposes by Jamaican FL teachers, showcasing preferences and engagement levels across multiple platforms. *YouTube* videos and PowerPoint are the most widely utilized tools, each with 26 mentions and a usage rate of 92.86%, reflecting their broad applicability and popularity. Live worksheets follow closely with 24 mentions and an 85.71% usage rate, highlighting their utility for interactive tasks. Platforms like Kahoot (21 mentions, 75%), Jamboard, Ed Puzzle, and videos (each with 20 mentions, 71.43%) further emphasize the strong preference for tools that promote engagement. AI-based tools are gaining traction, with *ChatGPT* being mentioned 17 times (60.71%), indicating growing adoption. Similarly, interactive tools like Quizizz and Jeopardy games each have 16 mentions (57.14%), while translation sites also achieved 16 mentions (57.14%), suggesting a consistent reliance on tools for language support. Quizlet sees moderate use with 15 mentions (53.57%), and other online materials/links and language-learning apps both receive 13 mentions (46.43%). With regard to creative and design platforms, Canva has a 42.86% usage rate (12 mentions), while reference tools like Word Reference are mentioned 10 times (35.71%). However, lower utilization is observed in tools such as Wordwall (5 mentions, 17.86%) and text-to-speech apps, which are noted only 2 times (7.14%). General-purpose tools like Google Maps are also infrequently used, with two mentions (7.14%), and presentation tools like Prezi have limited adoption at just one mention (3.57%).

Table 2

Technological tools used by Jamaican foreign language teachers

Tool/Approach	**N**	**%**
YouTube Videos	26	92.86%
PowerPoint	26	92.86%
Live Worksheets	24	85.71%
Kahoot	21	75.00%
Jamboard	20	71.43%
Ed Puzzle	20	71.43%
Videos	20	71.43%
ChatGPT	17	60.71%
Quizziz	16	57.14%
Jeopardy Games	16	57.14%
Translation sites (Google Translate, DeepL, Linguée, etc)	16	57.14%
Quizlet	15	53.57%
Other online materials/links	13	46.43%
Language Learning Apps	13	46.43%
Canva	12	42.86%
Word Reference	10	35.71%
Jeopardy	7	25.00%
Wordwall	5	17.86%
Text-to-Speech Apps to assist in recordings	2	7.14%
Google Maps	2	7.14%
Prezi	1	3.57%
Nearpod.com	1	3.57%
Learningapps.org	1	3.57%
Classtime.com	1	3.57%
Adobe Express	1	3.57%
Google Maps	1	3.57%

RQ2: What are Jamaican FL teachers' perceptions of technology integration and social media inclusion in their teaching?

Benefits of technology integration in foreign language education

When asked about the potential benefits of incorporating technology in FL education, educators provided a range of responses, such as its potential to engage and motivate students, enhance learning and interaction, provide access and flexibility, support authentic application and modernization, improve pedagogy, and develop students' creative skills.

Firstly, technology increases engagement and motivation by making lessons more engaging, fun, and interesting, grabbing students' attention and boosting motivation. As summarized by

one respondent, "*The motivation of the students is always high when using AI as well as knowledge acquisition*." Additionally, the visual and interactive nature of digital resources caters to diverse learning styles, leading to higher levels of engagement and knowledge acquisition. As noted by two other respondents, "*the resources vary to suit the different learning styles*," which "*increase students' interest*". Secondly, technology enhances learning and interaction. One-to-one interaction is highlighted as a key benefit. Technology facilitates "*better teaching and learning, better class interaction, [and] more student-centered[ness]*". The use of technology also "*exposes students to authentic materials*," leading to increased student interest and a more active learning process. Thirdly, technology offers flexibility by providing access to various learning resources and catering to diverse learning styles and paces. It provides immediate feedback, enabling students to work independently and at their own pace. As expressed by one respondent, technology increases student engagement, "*making each student active in class, doing exercises and activities, not just listening to the teacher talk. They also get immediate feedback - less delay with marking. Also, students can work at their own pace to some degree*." In addition, technology promotes real-world application and modernization. The integration of technology exposes students to authentic materials, keeps learning relevant, and helps students stay abreast with the current technological landscape, better preparing them for the demands of a digital world. Indeed, some "*students are more technologically advanced*" and need to be met "*half-way based on their interest in technology usage*," as technology "b*rings a level of real-life experience, which helps with engagement and entertainment while learning*." Furthermore, technology improves teaching practices. Technology helps teachers vary their approaches, presentation styles, and "*tap into the students' interests*", making the lesson more fun and interactive. It also facilitates sharing information "*outside of class time in preparation of upcoming lessons*". This allows for more efficient and effective teaching methods. Finally, technology integration fosters creativity by enabling students to create their own materials and projects. The autonomy allowed in the process enhances students' curiosity, which leads to discoveries. As noted by one respondent, "*Content becomes alive and is colorful and engaging. Students are more enthusiastic about learning and more responsible for learning new material. It is also interesting that they discover new things and come and share without being pushed*."

Challenges with technology integration in foreign language education

However, despite the many benefits mentioned by the teachers, they raised varying concerns regarding the challenges associated with integrating technology in FL education; these include technological access and infrastructure, students' usage and level of responsibility, resource management and preparation, and students' retention of information.

A major concern noted by the respondents relates to technological access and infrastructure. This includes issues such as unreliable internet connection, insufficient technological resources (projectors, computers, etc.), lack of classroom electrical outlets, and the need for technological training for both teachers and students. As summarized by one respondent, "*Depending on the class, the room may not have appropriate electrical outlet or too much lighting for projector, [making it] time-consuming to set up since [the] teacher doesn't have [their] own class*." An additional challenge refers to students' usage and responsibility of technology. Teachers are

concerned that some students may misuse technology; for instance, "*Students translate texts without trying on their own.*" According to the responses, some students also lack self-discipline and utilize technology for non-academic purposes (browsing, texting). Not all students may have equal access to technology at home, which limits their "*responsible use of technology"*. Furthermore, teachers lament resource management and preparation as a potential downfall of technology. Teachers require time and effort to create suitable materials for technology integration. For instance, "*It takes time sometimes to build material for gamification. Sometimes the internet isn't reliable - connectivity or sound issues*." Finding appropriate digital resources may also be time-consuming. As stated by a respondent, "*The greatest challenge is finding the right material to use. For example, finding the right video based on the topic to be taught."* These difficulties could be linked to a lack of "*teacher knowledge*" with manipulating technology. Additionally, there is a concern that students might focus too much on the technology itself, leading to reduced retention of the learning material. As noted by one respondent, "*The major issue I have with incorporating technology is that the students do not retain the information that they are learning as they are focused on the technology being utilized*."

The findings strongly emphasize the potential benefits of technology integration in FL classes. However, they also acknowledge the significant logistical, pedagogical, and practical challenges that need to be addressed to ensure successful and equitable integration.

Jamaican teachers' perceptions of social media inclusion in foreign language education

With regard to the place of social media in FL education, educators shared mixed and nuanced views. Those supportive of social media inclusion note its potential for increased engagement and motivation, authentic language exposure, the possibilities of collaboration and communication, greater reach and accessibility, and the opportunity for creative content creation. However, others raised concerns about language accuracy, appropriateness, potential misuse, and distraction.

Among the positive aspects of social media inclusion in FL teaching and learning, teachers cite its potential to increase engagement and motivation. Many of the respondents highlighted the correlation between social media and younger generations, stating that social networks could be used to increase student engagement and motivation in learning a FL. Social media platforms' interactive and dynamic nature is seen as a way to make language learning more fun and relevant. As expressed by one respondent, "*…as students are all over social media, it is important to stay current and meaningfully integrate social media to enhance learning*." In addition, social media offers "*exposure to authentic, contemporary use of the FL,"* going beyond the limitations of traditional textbooks and classroom materials. This exposure is seen as invaluable for developing cultural agency, fluency, and improving communication skills. One respondent noted, "*Yes, social media can be used to share grammatical rules, vocabulary, fun facts and cultural information on the FL culture*." Additionally, social media platforms facilitate communication and collaboration among students and "*connect language learners across the world with native speakers*," creating opportunities for peer learning, language exchange, and cultural immersion. In a similar way, social media can extend the reach of language learning beyond the confines of the classroom, providing opportunities for students to "*be introduced to*

accounts on the various platforms that they can follow in order to improve their competence." Furthermore, social media facilitates creative content creation. The ability to create and share multimedia content (videos, audio clips, etc.) through social media is seen as a way to enhance creativity and encourage active participation in language learning. As an example, students "*can create a TikTok video to explain a concept in a creative and fun way" as they are "usually interested in creating trendy videos that reinforce concepts."* Additionally, "d*ifferent platforms may be used to get feedback. Polls or surveys can be done via social media."* However, a key concern is the potential for inaccuracies and inappropriate language use on social media, as "*AI doesn't use proper language structure."* The informal nature of many social media platforms poses challenges in maintaining linguistic accuracy and appropriateness standards. One respondent was adamant that social media has no space in FL teaching and learning as "*it is not correct*". Besides, teachers are also concerned about the risk of students misusing social media, engaging in off-topic conversations, or using it for non-academic purposes. As one respondent said, "*Students will misuse social media for personal gain*."

In summary, although most respondents are in favor of social media integration in FL education, the responses reveal a lack of definitive consensus among educators. The potential benefits in terms of engagement, authentic language exposure, and collaborative learning are significant, but these advantages must be carefully weighed against the potential drawbacks concerning linguistic accuracy and misuse. The most prudent approach appears to involve cautious, well-planned integration with sufficient guidance and oversight to maximize the educational value and mitigate the risks.

RQ3: RQ3: What are Jamaican FL teachers' views and practices of ChatGPT in their teaching?

Teachers' perceptions of ChatGPT in foreign language education

When asked to provide three words that come to mind when they hear *ChatGPT*, teachers listed a range of perceptions, reflecting both the positive potential and possible downsides associated with this AI technology. The following themes emerged through content analysis:

Positive associations of ChatGPT

The first theme that emerged was future-oriented and innovative. Words like "future," "development," "innovation," and "transformative" suggest a perception of *ChatGPT* as a forward-looking and groundbreaking technology with the potential to reshape various aspects of life. The second theme, efficiency and ease of use, encompasses terms such as "convenient," "easy," "quick," "rapid," "effortless," and "accessible," which highlight the perceived efficiency and user-friendliness of the tool. It is perceived as a time-saving resource that simplifies tasks. The next theme, helpful and informative**,** surrounds descriptions like "helpful," "informative," "creative," "articulate," and "detailed," which suggest a view of *ChatGPT* being a useful resource for locating information, generating creative content, and improving communication. It is viewed as a tool that can help with various tasks. Finally, there was technological prowess. Notions like "technology," "AI," "information processing," and "generative AI" reflect a recognition of *ChatGPT*'s underlying technological competences and its position at the forefront of AI development, especially in our current dispensation.

Negative associations of ChatGPT

Notwithstanding the many positive themes, concerns were raised about academic dishonesty. The word "laziness" and the explicit mention of "academic dishonesty" reveal anxieties surrounding the potential misuse of *ChatGPT* for cheating and plagiarism, which can lead to metacognitive drowsiness. Similarly, another prominent issue concerns authenticity and accuracy. While "accuracy" is mentioned in a positive light, the mention of words like "fear" and "cheating" infers concerns about the accuracy and reliability of the information produced by *ChatGPT*. There is implicit suspicion about the legitimacy and originality of the output.

Neutral associations of ChatGPT

At the same time, *ChatGPT* has neutral associations. Adjectives like "convenient," "available," "easy," "fast," "reliable," "useful," and "innovative" provide neutral descriptors of *ChatGPT*'s features without expressing strong positive or negative connotations. These terms primarily focus on describing *ChatGPT*'s functionality and characteristics. The other neutral theme encompasses communication-related terms. Vocabularies like "communication," "messaging," and "interaction" highlight *ChatGPT*'s potential as a communication tool, without openly endorsing it as positive or negative.

To summarize, the word association reveals a compound and multidimensional perception of *ChatGPT*. While many respondents associate it with positive qualities such as innovation, efficiency, helpfulness, and ease of use, there are important concerns surrounding potential misuse, accuracy, and the broader ethical implications of this potent technology. The overall impression is that *ChatGPT* is viewed as a tool with considerable potential, but also noteworthy risks and challenges that need to be addressed. The neutral descriptive terms reflect the ongoing process of understanding and adapting to this rapidly evolving technology.

Foreign Language teachers' usage of ChatGPT

Table 3 shows the ways in which Jamaican FL teachers use *ChatGPT*. The main uses are to generate ideas for lessons (78.6%), create tasks for students (60.7%), and complete personal tasks (42.9%). However, 10.7 % indicated that they do not use the chatbot.

Table 3

Jamaican FL teachers' usage of ChatGPT

Usage of *ChatGPT*	**N**	**%**
Plan entire lessons	2	7.1
Generate ideas for my lessons	22	78.6
Correct students' tasks/assignments	1	3.6
Create tasks for my students	17	60.7
Explain complex content	8	28.6
Personal tasks	12	42.9
I do not use *ChatGPT*	3	10.7

Benefits of ChatGPT to Jamaica foreign language teachers

As can be seen in Table 4, *ChatGPT* presents notable benefits to Jamaican FL teachers, such as saving time and energy (85.7%), instant generation of information (71.4%), creativity in ideas generated (67.9%) and dissecting content into comprehensible output (42.9%).

Table 4

Benefits of ChatGPT to Jamaican FL teachers

Benefits of *ChatGPT*	N	%
Saves time and energy	24	85.7
Instant creation/production of information	20	71.4
Creativity and diversity in ideas generated	19	67.9
Breaks down content into comprehensible chunks	12	42.9
None	1	3.6

Limitations of ChatGPT to Jamaican FL teachers

Table 5 breaks down the perceived limitations of *ChatGPT* to Jamaican FL teachers, which include faulty content (32.1%), non-customized content (32.1%), and uninventive ideas (14.3%). However, some teachers (28.5%) do not find any drawbacks with the chatbot.

Table 5

Drawbacks of ChatGPT to Jamaican FL teachers

Drawbacks of *ChatGPT*	N	%
Faulty content	9	32.1
Content is not tailored to teachers' expectations	9	32.1
Lack of creative ideas suggested	4	14.3
None	8	28.5

Effects of ChatGPT on Jamaican foreign language teachers

Table 6 shows the perceived effects that *ChatGPT* has on Jamaican FL teachers. The chatbot makes teachers cautious in accepting some content (21.4%), causing very few to depend on AI (10.7%) and lose their creativity (7.1%).

Table 6

Effects of ChatGPT to Jamaican FL teachers

Effects of *ChatGPT*	N	%
Cautious in accepting content	6	21.4
Dependent on AI	3	10.7
Lose creativity	2	7.1
Not applicable	4	14.3

Discussion

The questionnaire item analysis on Jamaican FL teachers' usage and perceptions of technology and *ChatGPT* provides important new information on the teachers' views and practices from a diverse standpoint, which gives an inventory of the state of affairs in the discipline, as there is no known modern study that has been conducted in this regard in the local context.

Based on teachers' usage of technology, it is evident that they are exposed to and utilize diverse

technological tools to enhance FL pedagogy, whether for interaction and assessment, translation, or lesson creation and presentation. Among the top tools used are *YouTube* videos, PowerPoint, Live worksheets, and Kahoot! *ChatGPT* is ranked as the top generative AI tool used, which shows its growing propagation in the Jamaican FL classroom. Still, some tools are underutilized or unknown, but this could be because of teachers' limited knowledge of them or due to the socio-cultural and institutional contexts in which they operate. Nevertheless, it is also true that given the plethora of tools that exist, teachers have to choose what to include in their classes and what will yield the best results based on their lesson objectives.

The findings highlight that teachers have accessible technological tools such as laptops/computers, tablets, projectors, and speakers to help them enhance their pedagogical practices. This is enhanced by the positive attitude that their school administrations hold with regard to their position on technology integration in teaching in learning. The majority of the schools support technology (96.4%), with some even mandating its incorporation in lesson planning, while others are establishing official technological plans to enhance academic purposes. This suggests that administrators are cognizant of the era in which we live, which is defined by technological advancements. Their openness to technology integration aligns with the country's ICT in education policy, which promotes a teaching environment that fosters the students' adaptability to new technologies. In fact, the policy underscores that "*we must not only continue to refresh our curriculum to ensure that the knowledge, skills, and values taught to them remain current and relevant, but also that modern methodologies are employed in imparting and sharing knowledge*" (Ministry of Education and Youth, 2022, p. i).

The study reveals that technology brings numerous benefits to the FL classroom, including its potential to increase students' engagement and motivation, enhance learning and interaction, provide access and flexibility to different categories of learners, support authentic application and modernization of learning, enhance teachers' didactics, and develop students' creative skills. The findings support the position of Al-Mahrooqi and Troudi (2014), who note that the application of CALL provides a student-centered learning environment. Additionally, it assists teachers to vary lesson presentation styles to encourage and motivate students of diverse interests, provide opportunities for learning outside of the classroom, even with native speakers, and is perceived to cater more to individual differences. Moreover, ICT brings dynamism to the classroom, increases learner autonomy (Mexhuni, 2014), and promotes cooperation, which leads to cultural awareness (Dedja, 2015). All of these advantages make learning more active and interactive for students (Thomas & Schneider, 2020).

The above-mentioned benefits align with teachers' perceptions of the positive outcomes of social media inclusion in FL teaching and learning. They believe social media can equally promote student engagement and motivation, expose them to authentic language and culture, promote collaboration and communication, foster wider reach and accessibility, and support creative content creation. These findings are in line with Nasution (2022), who reports that language learning with social media provides opportunities for the development of various language skills in reading and writing. Cabrera (2018) notes that social media can allow for the imbedding of language acquisition in real-life social contexts and play an important role in communicative and creative activities in which young people engage. Social media is a

common feature of many Jamaican students with *Facebook*, *Instagram*, and *TikTok* being among the most popular networks. Given the frequency with which many of these students interact with social media, increasing its usage in the FL classroom could bring about new exploits for both learners and instructors, thereby promoting technology-enhanced instruction through Task-Based Language Teaching (TBLT), Project-Based Learning and Teaching (PBLT) and Content Language Integrated Learning (CLIL). All of these approaches encourage the socio-constructivist approach to learning, where students "learn by doing" in real-life situations.

Despite the advantages of technology integration in FL teaching and learning, educators raised a few challenges, such as technological access and infrastructure, students' potential misuse and irresponsibility, teachers' lack of resource management and preparation, and students' inability to retain information. The findings coincide with Lozano and Izquierdo (2019), who highlight that technical problems such as slow internet connection, outdated computers, and lack of compatible software can affect CALL. Pazilah et al. (2019) caution that students may get easily distracted and might misuse technology, which is a concern that teachers also raise as one of the disadvantages of social media inclusion in the FL classroom. Mai (2021) indicates that some students may waste time on social networks checking news and updating information or status. In addition, teachers are concerned about language accuracy and appropriateness with regard to social media integration. Mai (2021) states that concerning language proficiency, young people often utilize abbreviations or slang to communicate with each other. As most social networks use written content messages, sometimes students encounter many problems when they are asked to speak in the standard target language. Nevertheless, balance is needed as a language's standard and sociolinguistic aspects are vital to pragmatic communication. Pazilah et al. (2019) also argue that frequent use of technology can limit students' thinking potential. Furthermore, McMurry et al. (2016) address the issue of inadequate teacher education and experience to manipulate CALL tools as further limitations.

The findings also reveal that teachers hold both positive and negative perceptions of *ChatGPT*. On the positive side, *ChatGPT* is perceived as future-oriented, innovative, efficient, user-friendly, helpful, edifying, and technologically skillful. On the downside, teachers have raised concerns about academic dishonesty and data output authenticity and accuracy.

In terms of usage, most of the respondents utilize *ChatGPT* to generate ideas for their lessons, create tasks for their students, explain complex content, and complete personal tasks. This explains why, in terms of benefits, teachers praise the chatbot for the instant production of information, the diversity of ideas generated, and the manner in which it breaks down information into comprehensible chunks. It is not surprising, then, why the majority indicated that the chatbot "saves time and energy". However, faulty and non-tailored content are among the main limitations raised.

Evidently, *ChatGPT* brings numerous benefits to FL education, as established by Nguyen (2023). The findings are in line with Karataş et al. (2024) and Kohler (2024) who reported that *ChatGPT* allows teachers to access data more quickly, creating lesson plans, teaching materials, quizzes, worksheets, and assignments more efficiently. Madden et al. (2024) and Alsaweed and Aljebreen (2024) also found that *ChatGPT* offers strong support to human teachers by reducing their workload and providing them with a wide range of information on any given topic and

generating that information straight away. *ChatGPT* is a versatile platform that allows teachers to design various tasks and exercises to cover the different language competencies (Zaiarna et al., 2024).

However, teachers have to be careful when using *ChatGPT* as it may lead to overreliance (Pham & Le, 2024), which can affect teachers' creative and critical-thinking skills. Bang et al. (2023) also warn of the dangers of *ChatGPT* producing inaccurate and inconsistent information. This means that teachers have to scrutinize the information generated from the chatbot. In fact, due to this, one respondent said, "*It is very important for FL teachers to be on top of their game and be knowledgeable of such things as grammar, usage, and correct cultural information*." Kohnke et al. (2023) highlighted that *ChatGPT* struggles with cultural subtleties. Given the concerns about credibility of information, teachers should cross-reference sources to ensure the content generated is reliable before passing it on to their students. This means that teachers have to be ethical and responsible when using *ChatGPT*.

To guarantee accuracy, teachers could collaboratively design lesson plans and activities. Group-based tasks necessitate communication, collaboration, and coordination, which will add to the human element, which *ChatGPT* currently lacks. During this process, teachers will be able to peer review each other's work and identify any potential inaccuracies and misuse of AI. This same principle of teamwork is applicable to students to ensure group accountability. Additionally, teachers should consider *ChatGPT* as a brainstorming support unit to avoid overreliance on the chatbot, instead of using it to fully generate content. Overdependence on the chatbot also requires teachers to design assessments that increasingly require a high level of originality and creativity on the part of the student, as AI tools are less effective in this regard. For instance, teachers could give students tasks requiring personal reflection or specificities about local contexts, making it harder for students to rely solely on AI-generated content. Moreover, written tasks or projects could be accompanied by oral presentations with spontaneous questions at the end, which will foster independent thinking (Sherma, 2024). These approaches will likely minimize students misusing AI and foster deeper learning, critical thinking, and problem solving among them.

Conclusion

The study found that Jamaican school administrators are in favor of technology integration and that FL teachers are familiar with and utilize a range of technological tools to enhance the teaching and learning process. Majority of them are for assessment, interaction, and presentation purposes, such as *YouTube* videos, PowerPoint, live worksheets, and Kahoot! The variety of technological tools adds diversity to the classroom and helps to engage and motivate students. Furthermore, technology enhances learning and interaction, provides access and flexibility to different categories of learners, supports real-life application and modernization of learning, boosts teachers' didactics, and develops students' creative skills. Additionally, teachers believe that the incorporation of social media platforms can enhance student engagement and motivation, expose learners to authentic language and culture, promote international collaboration and communication, and support content creation. Consequently,

Jamaican FL teachers should consider integrating platforms such as *Facebook*, *Instagram*, and *TikTok* into the teaching and learning dynamic, where feasible, to promote tasked/project-based learning, while taking into account the socio-cultural and institutional implications of this decision. Despite the affordances of technology, educators have raised some challenges, including the absence of technological and infrastructural access, potential misuse by students, lack of training among some teachers, and students' inability to retain information due to distraction. These are issues that the Ministry of Education and Youth and local institutions can address to improve the situation.

Concerning *ChatGPT*, it is the top generative AI tool used by teachers. They use it to generate ideas for their lessons, create tasks for their students, explain complex content, and complete personal tasks. They appreciate it for its prompt production of information, its variety of ideas generated, and the manner in which it breaks down information into comprehensible chunks. They overwhelmingly agree that *ChatGPT* helps them to save time and energy. However, teachers must be mindful of the chabot's over-reliance, as it can affect creative and critical-thinking skills. Additionally, teachers should be cognizant of *ChatGPT*"s limitations, as it can produce faulty and inconsistent information. It is also limited in terms of cultural nuances. Consequently, teachers must carefully peruse the information produced by the chatbot to ensure credibility and validity before imparting it to students.

Given the affordances of social media and technology integration in FL education highlighted by the teachers, it is recommended that curriculum facilitate their inclusion on a wider scale and a more structured basis to enhance learning outcomes. As a result, institutions planning FL teaching should include interactive ICT pedagogical materials appropriate to different types of content and courses at the various levels of the education system. However, as not all schools and students have the same degree of access to technological devices and infrastructure, stakeholders in the educational sector should make the requisite investment to ensure equity, particularly in rural contexts. Furthermore, as students can misuse technology, it is useful for teachers to promote social media literacy and digital literacy. Therefore, students should be provided with clear guidelines when using technology in the classroom, which should be monitored and reinforced by the teacher, so that they remain on-task to complete learning objectives. Similarly, teachers should engage in continuous training and professional development to enhance their digital competencies and keep current with the latest and most appropriate technological platforms. It is also critical for teacher preparation programs to have specific CALL courses so that new teachers are exposed to the intricacies of technology integration in FL education before they enter fully into the teaching profession.

As it relates to *ChatGPT*, it is growing in usage among both teachers and students. Undoubtedly, the advent of this disruptive enhancer has revolutionized education systems worldwide. It is expected that over time its usage in the Jamaican context will increase. Consequently, teachers and educational institutions should be encouraged to be flexible in their mentality to adapt instruction and assessments in consideration of this inevitable technology. However, as questions of ethics, accuracy, and authorship are many, institutions will need to develop AI policies to govern *ChatGPT* in the formal curriculum. Both ANPE and JAFT could also collaborate with the teacher-training and foreign language departments of local and regional

universities to organize workshops and think tanks to empower FL teachers in this era of accelerated technological and AI advancements.

Limitations of the study

Some limitations are associated with the present study. Firstly, the sample size consisted of 28 FL teachers, which is not a wide representation of the modern language teaching fraternity in Jamaica; therefore, the findings cannot be generalized. Majority of the participants were teachers of Spanish at the secondary level. Although Spanish is the primary FL taught in Jamaica, the study could have benefitted from more responses from the primary and tertiary levels, which have their unique contexts. The study also lacks experiences from teachers who teach minority FLs such as Chinese Mandarin, Japanese, and Portuguese. Their contribution could have provided a broader scope into technological practices in terms of similarities and differences. Secondly, although the questionnaire included both open- and closed-ended questionnaires, it would have been useful to incorporate interviews as a second data collection tool to gather deeper insights from some of the teachers. Similarly, it would have been ideal to gain insights from the Education Officers responsible for foreign languages within the Ministry of Education and Youth. Lastly, although many participants have had exposure to *ChatGPT*, some were still in the process of discovering the depth of its features; consequently, to some extent, they could not provide an insightful analysis of some of the questions asked.

Future research

As this study focused on FL teachers' usage and perceptions of technology and *ChatGPT* in the classroom, future studies could explore students' attitudes towards these technological tools. Additionally, future studies could examine *ChatGPT*'s potential to enhance students' language skills, particularly writing. Furthermore, research could investigate pre-service teachers' technological training and preparation in applied linguistics and their usage of technology while on teaching practice. Moreover, studies could also probe teacher trainers' knowledge, usage, and integration of technology in teacher preparation programs and the impact this has on pre-service teachers' practices.

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