

**LEARNING LANGUAGES ONLINE IN GHANAIAN HIGHER EDUCATION  
DURING COVID-19 FROM THE PERSPECTIVE OF STUDENTS**

***APRENDIZAGEM DE LÍNGUAS ON-LINE NO ENSINO SUPERIOR GANENSE  
DURANTE A COVID-19 NA PERSPECTIVA DOS ESTUDANTES***

***APRENDIZAJE DE LENGUAS EN LÍNEA EN LA EDUCACIÓN SUPERIOR  
GHANESA DURANTE LA COVID-19 DESDE LA PERSPECTIVA DE LOS  
ESTUDIANTES***



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**ABSTRACT:** The study aims to examine students' perceptions regarding the online learning of languages, including English, French, Spanish, Chinese, and Ghanaian languages, at the higher education level in Ghana during the COVID-19 pandemic. In the study, a quantitative survey approach was adopted. The data were collected from 138 purposively selected undergraduate students via an online questionnaire and an observation form developed by the researchers. The obtained data were analysed using descriptive and inferential statistics. The results revealed that more than half of the participating students preferred learning languages online. The challenges faced included internet connectivity problem, lack of internet access, limited technological proficiency among learners, lecturers' limited knowledge of online platforms, frequent power outages, and absence of electricity in some communities.

**KEYWORDS:** Learning languages. Online education. Higher education. Perceptions of students.

**RESUMO:** O estudo tem como objetivo examinar as percepções dos estudantes acerca da aprendizagem de línguas online, incluindo inglês, francês, espanhol, chinês e línguas ganenses, no ensino superior em Gana durante a pandemia de covid-19. No estudo, adotou-se uma abordagem de levantamento quantitativo. Os dados foram coletados de 138 estudantes de graduação selecionados intencionalmente, por meio de um questionário online e de um formulário de observação desenvolvido pelos pesquisadores. Os dados obtidos foram analisados utilizando estatística descritiva e inferencial. Os resultados revelaram que mais da metade dos estudantes participantes preferiu aprender línguas on-line. Os desafios enfrentados incluíram problemas de conectividade à internet, falta de acesso à internet, limitada proficiência tecnológica entre os estudantes, conhecimento limitado dos docentes sobre plataformas on-line, frequentes quedas de energia e ausência de eletricidade em algumas comunidades.

**PALAVRAS-CHAVE:** Aprendizagem de línguas. Educação on-line. Ensino superior. Percepções dos estudantes.

**RESUMEN:** El estudio tiene como objetivo examinar las percepciones de los estudiantes sobre el aprendizaje de lenguas en línea, incluyendo inglés, francés, español, chino y lenguas ghanesas, en la educación superior en Ghana durante la pandemia de COVID-19. En el estudio se adoptó un enfoque de encuesta cuantitativa. Los datos fueron recopilados de 138 estudiantes de pregrado seleccionados de manera intencional, mediante un cuestionario en línea y una ficha de observación desarrollada por los investigadores. Los datos obtenidos fueron analizados utilizando estadística descriptiva e inferencial. Los resultados revelaron que más de la mitad de los estudiantes participantes prefirió aprender lenguas en línea. Los desafíos incluyeron problemas de conectividad a internet, falta de acceso a internet, limitada competencia tecnológica entre los estudiantes, conocimiento limitado de los docentes sobre plataformas en línea, frecuentes cortes de energía y ausencia de electricidad en algunas comunidades.

**PALABRAS CLAVE:** Aprendizaje de lenguas. Educación en línea. Educación superior. Percepciones de los estudiantes.

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## **INTRODUCTION**

This study is situated in a Community of Inquiry framework, which proposes a model of online learning based on meaningful interaction located in teaching presence (the online interaction of the teacher in facilitating and supporting learning), social presence (the feeling of being with a ‘real’ person in a virtual reality” (Garrison et al., 1999; Savvidou et al., 2022). In other words, this study draws on sociocultural theories by Vygotsky (1978), which highlights how learners engage in collaborative and constructivist learning experiences.

All educational institutions in Ghana closed because of the pandemic of the Corona virus in March 2020, and this necessitated online delivery of education (University World News, 2020; Tabiri et al., 2022). However, the challenges that students and instructors encounter in adopting or adapting online learning when it is time for teaching and learning languages like English, French, Spanish, Chinese and Ghanaian languages in developing countries where the use of technology is not popular cannot be overemphasized (Tabiri et al., 2022). In light of this, the researchers decided it would be wise to start this study in order to investigate students’ perceptions regarding learning languages like English, French, Spanish, Chinese and Ghanaian languages online in advanced education in Ghana during COVID-19 contagion.

Following the arrival of COVID-19 pandemic, learning online became “an alternative to popular traditional, brick and mortar schools and universities and advocates promote the former as a way for learners to pursue their studies at their own pace in almost any location” (Tabiri et al., 2022, p.208). Nevertheless, it is evident from the data available that poor internet connectivity and accessibility pose a significantly high problem for developing countries (Karsenti et al., 2020; Tabiri, 2021). Additionally, it is true that technology is currently the finest alternative for teaching and learning during the COVID-19 pandemic. But it is impossible to overstate the difficulties that technology presents, particularly for learners from developing nations.

The focus is on how students felt about learning languages online at an advanced educational level in Ghana during the time when the COVID-19 epidemic caused many educational institutions to close down. Also, the study seeks to explore the reason students like or dislike learning some languages online, whether all languages can be learned online without face-to-face or in-person lectures, as well as unravelling the major issues students usually encounter learning languages online and how to minimized those problems in higher education in Ghana.

The following objectives serve as a guide for this study:

1. To investigate why students of languages in higher education like learning languages online.;
2. To determine the factors that compel students not to like learning languages online from the point of view of the students offering tertiary education in Ghana;
3. To provide some pedagogical strategies to minimized students' difficulties with online learning in higher education in Ghana.

## **LITERATURE REVIEW**

The utilization of distant learning programmers, open educational resources, and platforms that schools and teachers can utilize to contact students remotely and minimize the disruption of education was advised by UNESCO after schools practically everywhere were closed (Tabiri et al., 2022; UNESCO, 2020). Webinar became the best option for teaching and learning during COVID-19 (Karsenti et al., 2020; Tabiri et al., 2022). Madhavi (2010) asserts that the communicative approach to language learning integrates a wealth of high-quality content with adaptable, interactive multimedia technologies.

In other words, the development of technology in didactics (TD) promotes andragogy, which lessens the emphasis on the teacher in teaching and learning. But the study found that conventional education is more successful (Basilaia & Kvavadz, 2020). In other words, face-to-face learning and online learning are different from one another (Brown & Park, 2015; Çalık & Altay, 2021; Kank, 2021; Paul & Jefferson, 2019). Al-Zboon (2020) carried out a study to assess the efficiency of remote learning and direct instruction on first-year secondary students' proficiency in Arabic in Jordan.

In-person teaching and learning might be the best option of learning due to the difficulties that are typically connected to online teaching and learning as Mahat *et al.* (2021) highlighted the following: “students cannot avoid encountering difficulties and obstacles when utilizing online learning” (p. 162). Despite the problems and obstacles that students encounter in using the online platform, it has been found that online learning and teaching promotes student-centeredness and active participation of all students (Candelaria, 2023; Huba & Freed, 2000; Ritonga, 2020).

As this study focuses on the online learning of languages in higher education in a developing country in Africa, the results will significantly differ from those of Kokroko et al. (2020) and Tabiri et al. (2022) who concentrated on the challenges that students faced in learning French and English languages online, but further supports some findings of Tabiri et al., 2022; Kokroko et al., 2020; Alscher, 2024; Özfidan & Marks, 2025) regarding how university students adopt online learning and the challenges that students encounter in learning languages online.

### *The hypotheses and research questions*

#### *Hypothesis 1*

We hypothesize that students who perceive high teaching and social presence in online learning environments are more likely to express positive attitudes toward online language learning.

#### *Hypothesis 2*

We hypothesize that students who experience frequent technical challenges, such as poor internet connectivity and lack of digital devices, are more likely to report negative attitudes toward learning languages online.

#### *Hypothesis 3*

We hypothesize that students who receive structured pedagogical support, such as training in online tools and language-specific strategies are more likely to overcome challenges and develop positive experiences with online language learning.

The research questions of the study have been formulated as in the following:

1. What are opinions of tertiary level students in Ghana about the factors that cause to like or not to like learning languages online?
2. What are the major problems that tertiary level students usually encounter when learning languages online?
3. What can be some pedagogical strategies to minimize students' difficulties with online learning in higher education in Ghana?

## **METHODOLOGY**

### ***Research design***

The study adopted a quantitative technological method to gather data. Alternatively, the study used a quantitative survey methodology. Although qualitative insights such as interviews or focus group discussions could have offered deeper understanding of students' attitudes and experiences with online language learning, the researchers opted for a quantitative research design. This decision was influenced by the restrictions posed by the COVID-19 lockdown, which made face-to-face interactions impossible and limited the practicality of qualitative approaches. Consequently, a structured online questionnaire was employed to efficiently collect data from a larger sample while adhering to safety protocols.

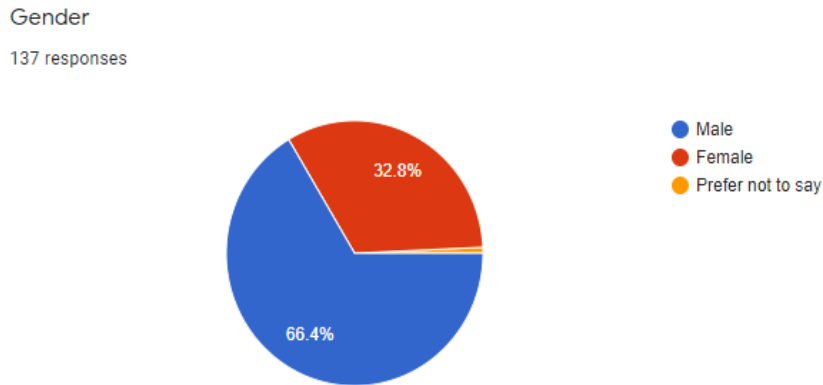
The undergraduate students who study language courses online at the tertiary level were given an online questionnaire in the form of a google form or link. The link was created and distributed to participants as part of the technological approach survey, and the participants were allowed to participate in the research remotely by responding to the questionnaire and helping the researchers find the answers to the study's research questions. The researchers invited all 600 students who could be inclined to respond to the questionnaire to do so after sharing the link with participants with the support of their professors. Three weeks were given to the students to participate in the study. Before the Coronavirus pandemic in Ghana, some of these participants had been learning online in a hybrid method (online and face-to-face simultaneously).

### ***Participants and Sampling***

There were 600 participants in the study. The study site and participants were chosen using the purposive sampling approach. Accordingly, the researchers chose colleges and universities that have a reputation for using technology wisely both before and after the coronavirus pandemic. Out of the 600 first-year students, 138 from Ghana Communication Technology University, University of Ghana, Legon, University of Professional Studies, Accra, and University of Education, Winneba, voluntarily responded to an internet questionnaire. According to Parahoo (1997) and Shaughnessy, Zechmeister and Zechmeister (2012), a purposive sampling strategy is typically used in studies based on the respondents' capacity to produce relevant data. The researchers' decision is compatible with their findings. Following

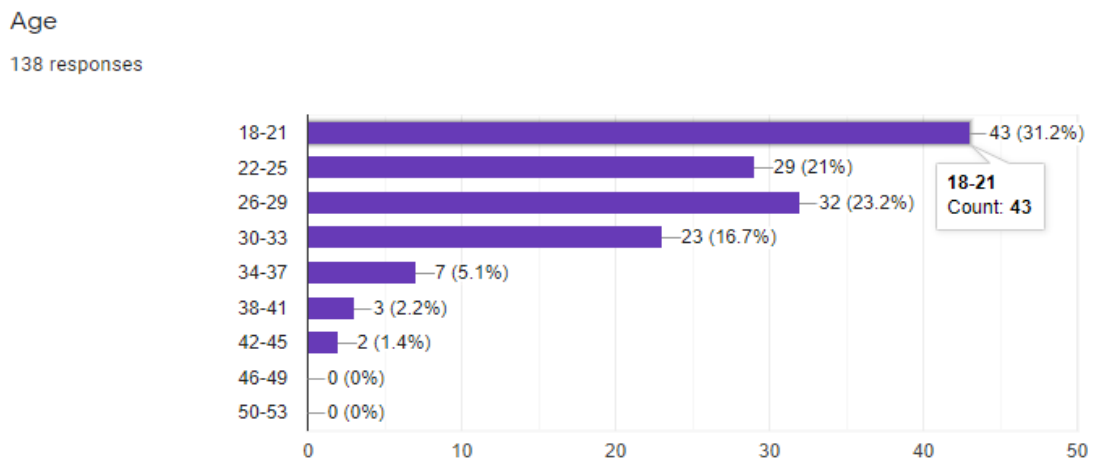
the implementation or adaptation of online learning and teaching by their universities, the researchers sought to understand how students in Ghana’s higher education perceived studying languages online during the COVID-19 pandemic. As is seen in Figures 1 and 2, majority of students are between the ages of 18 and 29, and likewise majority of them are male students.

**Figure 1.**  
*Student’s Gender*



Note. Created by authors.

**Figure 2.**  
*The ages of the participants*



Note. Created by authors.

## **DATA COLLECTION TOOLS**

The tools used to collect data were observation and a questionnaire, both of which were developed by the researchers. One hundred and thirty-eight students from four Ghanaian universities willingly answered eight questions to enable the researchers to assess students' perceptions regarding learning languages online in higher education in Ghana during COVID-19 pandemic. Although observation was initially considered as a complementary tool, pandemic-related restrictions limited its effective application.

The questionnaire was validated by experts in educational technology and language education to ensure content validity. A pilot test was also conducted with a small sample to refine the instrument, ensuring clarity and internal consistency. To establish reliability, the internal consistency of the questionnaire was measured using Cronbach's Alpha, which yielded a coefficient of 0.81, indicating a high level of reliability suitable for social science research.

## **DATA ANALYSIS**

The data gathered through technological means (google forms) were analyzed using both descriptive and inferential statistics. Descriptive statistics (e.g., frequencies, means, and standard deviations) were used to summarize students' responses. Inferential statistics, particularly multiple regression analysis, were used to determine the relationship between key variables such as access to technology, prior experience with online learning, and students' overall perceptions. Although multiple regression is an appropriate technique for the study, it is important to note that the analysis assumed that standard regression assumptions were met. These include; normality of residuals (to ensure the error terms are normally distributed), homoscedasticity (to confirm constant variance of errors across all levels of independent variables), and independence of observations.

### ***Limitations***

While the analysis proceeded under the assumption that these conditions held, the study acknowledges that limited access to in-person data validation may have constrained a thorough diagnostic check of these assumptions. Future studies may consider more rigorous checks using normality plots, variance inflation factor (VIF) calculations, and Durbin-Watson statistics,

especially when data are collected under less restrictive conditions. The study suggests that academic performance is a predictor of positive attitudes, but causation is not established.

## RESULTS

The results are presented referring to each research question as follows:

1. *What are the opinions of tertiary level students in Ghana about the factors that cause them to like or not to like learning languages online?*

To verify whether students had ever studied any language online, they were requested to express their opinions on the following issue:

When was the first time you studied a language online?

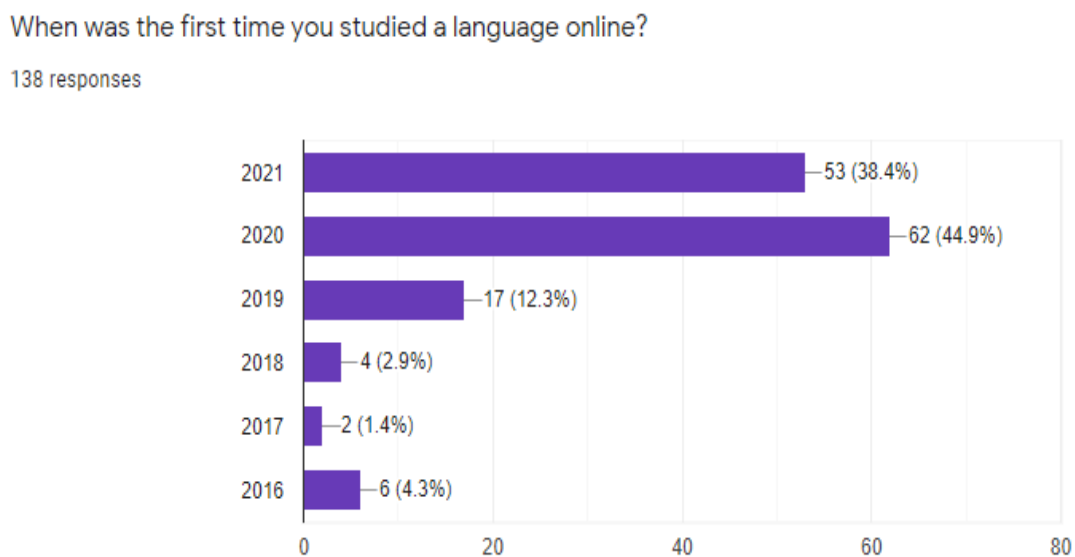
**Table 1.**

*The first-time students studied a language online*

<b>First-Time Students studied a language online</b>	<b>N</b>	<b>%</b>
<b>2020</b>	62	43
<b>2021</b>	53	37
2019	17	12
2016	6	4
2018	4	3
2017	2	1
<b>Total</b>	<b>144</b>	<b>100</b>

*Note.* Created by author.

**Figure 3.**  
*The first time of studying a language online*



Note. Created by authors.

Also, the researchers asked the students to present their opinions on the number of languages they had been learning online by expressing their interpretation of the question: How many languages have you been learning online?

**Table 2.**  
*Number of languages students have been learning online*

Number of languages students have been learning online	N	%
1	64	44.4
2	60	42
3	12	8.3
None of the languages	6	4
4	2	1.3
<b>Total</b>	<b>144</b>	<b>100</b>

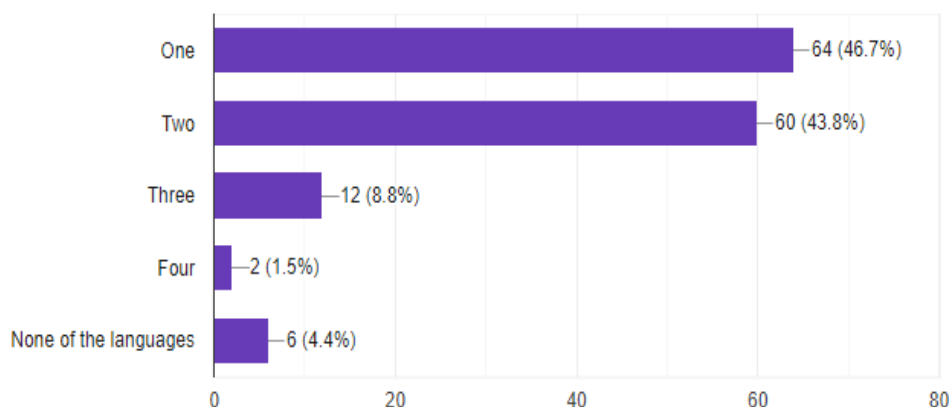
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Table 2 indicates 44.4% of students studied at least more than one language online, 42% studied two languages online, 8.3% studied three languages online, while 4% studied none of the languages online and 1.3% studied four languages online. The figure below illustrates the languages that students have been learning online:

**Figure 4.**  
*Languages students have been learning online*

How many languages have you been learning online?

137 responses



*Note.* Created by authors.

Again, the participants were asked to mention the languages that they had ever studied online. Their responses are as follows:

**Table 3.**  
*Languages students have ever studied online*

Languages students have ever studied online	N	%
English	73	34
Ghanaian Languages	68	32
French	48	23
Spanish	10	5
None	9	4
Chinese	4	2
Total	212	100

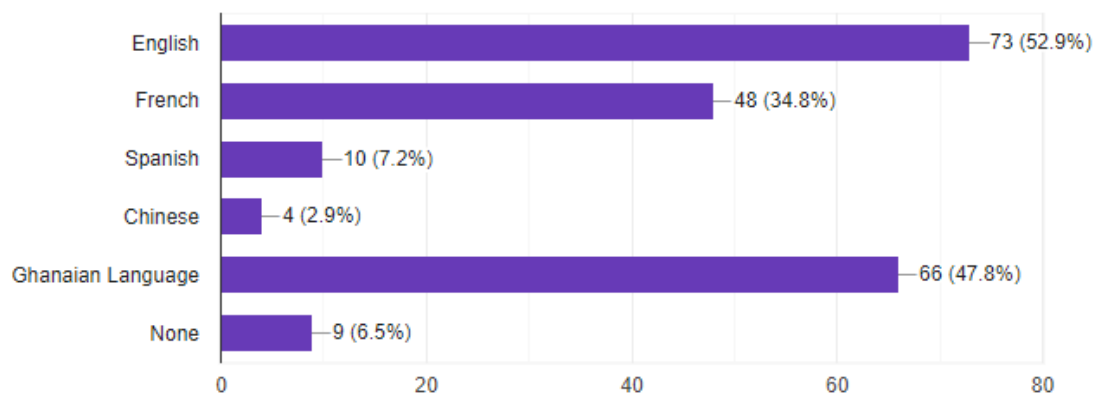
*Note.* Created by authors.

It is evident in Table 3 that 34% of the University students studied English online, 32% studied Ghanaian languages, 23% of the students studied French online, 5% studied Spanish, 2% studied Chinese online while 4% of the students studied none of the five languages online. The following figure stresses the languages students have ever studied online:

**Figure 5.**  
Mention the languages you have ever studied online

Mention the languages you have ever studied online.

138 responses



Note. Created by authors.

Moreover, the participants were asked to state the aspects of language that they like or don't like learning online.

**Table 4.**  
Languages students like or do not like learning online

Responses	N	%
Yes	76	55.5
No	61	44.5
<b>Total</b>	<b>137</b>	<b>100</b>

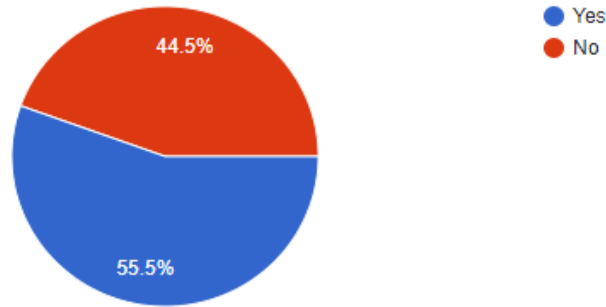
Note. Created by authors.

Table 4 shows that 55.5% of the participants responded that they like learning all languages online while 44.5% of the students did not like studying languages online.

The following figure highlights the languages that students like or don't like learning online:

**Figure 6.**  
*Whether students like learning languages online or not*

Do you like learning or studying all the aspects of languages online?  
137 responses



Note. Created by authors.

Figure 6 shows that 55.5% of the participants responded that they like learning all aspects of languages online while 44.5% of the students did not like studying languages online.

Moreover, the students were to state their preference of learning a particular language online. Table 5 below shows the results:

**Table 5.**  
*Why students like learning a particular language online*

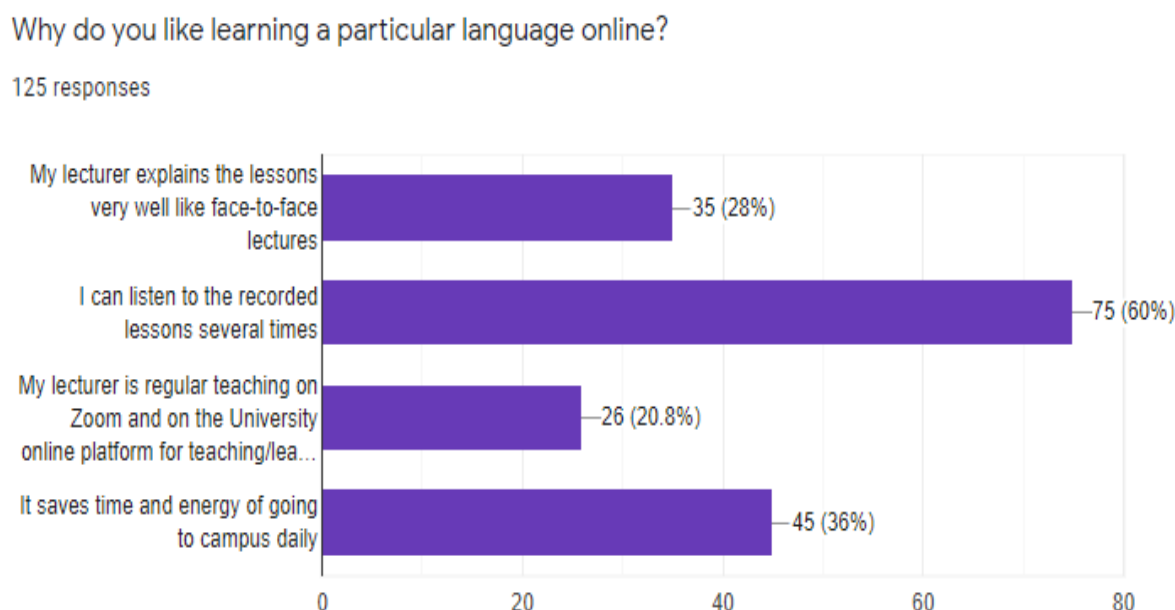
Learning a particular language online	N	%
I can listen to the recorded lessons several times	75	41.4
It saves time and energy of going to campus daily	45	25
My lecturer can explain the lessons very well like face-to-face lectures	35	19.3
My lecturer is regular teaching on Zoom and the University online platform	26	14.3
<b>Total</b>	<b>181</b>	<b>100</b>

Note. Created by authors.

From Table 5, one deduces that students like learning a particular language online for the following reasons: to listen to the recorded lessons several times (41.4%), to save time and energy of going to campus daily (25%), lecturers being able to explain the lessons very well like face-to-face lectures (19.3%) and lecturers being regular teaching on Zoom and the University online platform (14.3%). Figure 7 exemplifies the reasons students like learning a particular language online:

**Figure 7.**

*Why students like learning a particular language online*



Note. Created by authors.

1. *What are the major problems that tertiary level students usually encounter learning languages online?*

In addition, the participants of the study were asked why they did not like learning a specific language online, and the table below shows their responses:

**Table 6.**

*Why students don't like learning a specific language online*

Why students don't like learning a specific language online	N	%
It consumes data	63	41.1
It is difficult learning a language online	52	34
It is expensive learning a language online	28	18.3
The lecturer cannot explain the lessons/lectures online	10	6.6
<b>Total</b>	<b>153</b>	<b>100</b>

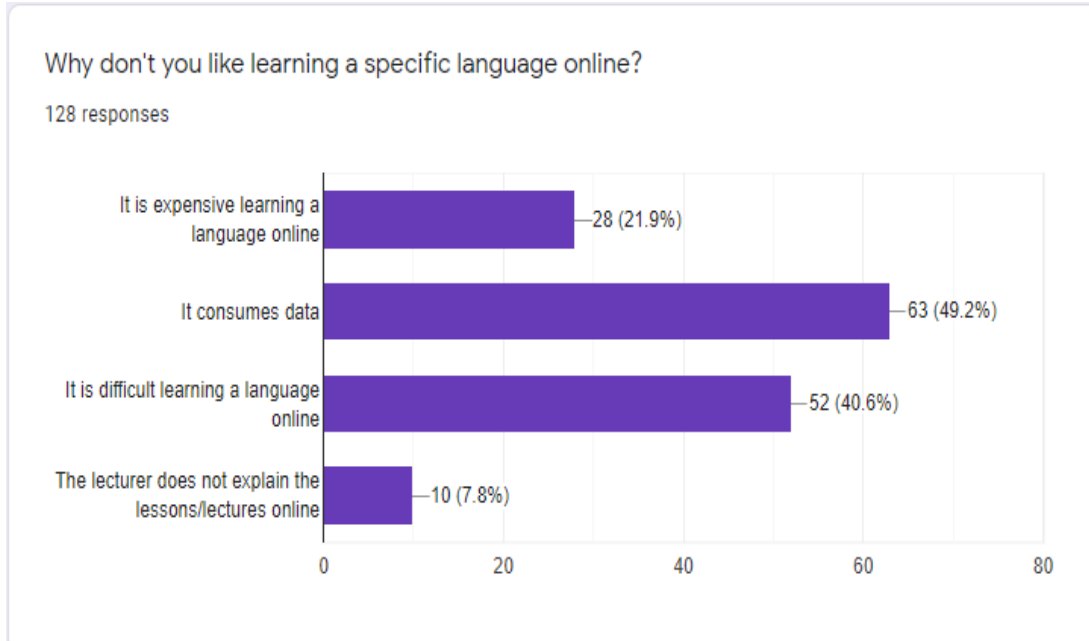
Note. Created by authors.

From Table 6, one realizes that students do not like learning a specific language online due to the following reasons: learning online consumes data (41.1%), it is difficult learning a language online (34%), it is expensive learning a language online (18.3%) and because the lecturer cannot explain the lessons/lectures online (6.6%).

The following figure throws more light on why the students did not like learning a specific language online:

**Figure 8.**

*Why don't you like learning a specific language online?*



Note. Created by authors.

Finally, the participants were asked to state the problems that they usually encounter learning languages like English, French, Spanish and Chinese online.

**Table 7.**

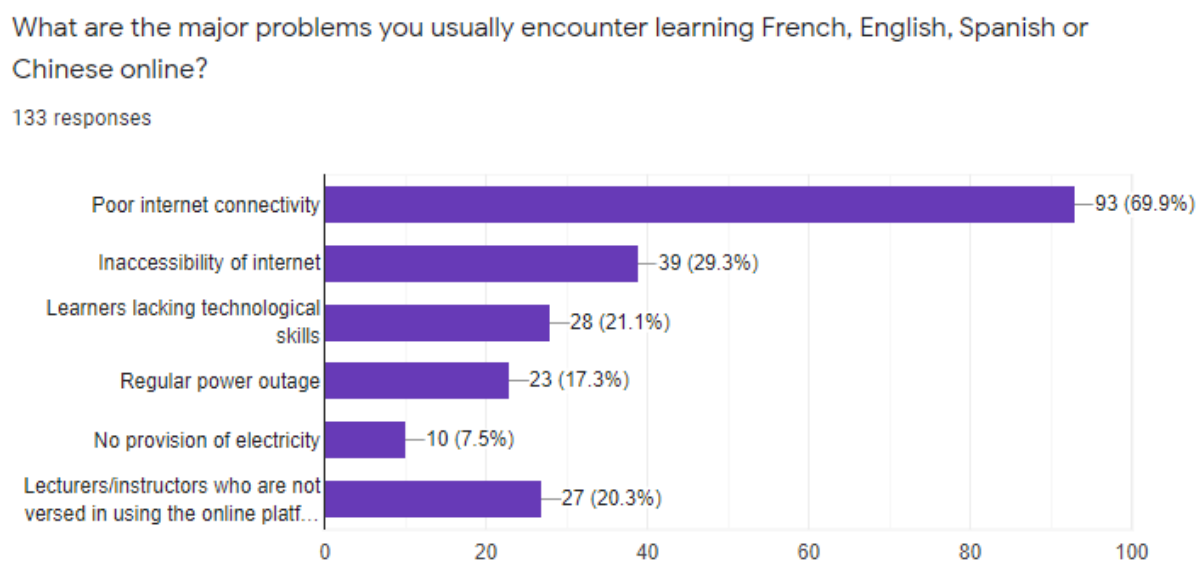
*The major problems students usually encounter learning languages online*

The major problems students usually encounter learning languages online	N	%
Underprivileged internet connectivity issues	93	42
The remoteness of internet space	39	18
The absence of technological skills on the part of learners:	28	13
Lecturers/instructors who are not versed in using online platforms:	27	12
Regular power outage	23	10
No provision of electricity:	10	5
<b>Total</b>	<b>220</b>	<b>100</b>

Note. Created by authors.

**Figure 9.**

*The major problems students usually encounter learning languages online*



Note. Created by authors.

According to the students, based on their online experiences, the major problems they usually encounter when learning languages online are underprivileged internet connectivity issues (42%), remoteness of internet space (18%), the absence of technological skills on the part of learners (13%), lecturers/instructors who are not versed in using the online platforms (12%), regular power outage (10%) and no provision of electricity (5%).

**2. What can be some pedagogical strategies to minimize students' difficulties with online learning in higher education in Ghana?**

The participants were asked to suggest ways by which the problems they encountered learning languages online could be minimized. Their responses are as follows:

**Table 8.**

*Ways of minimizing problems students encounter learning languages online*

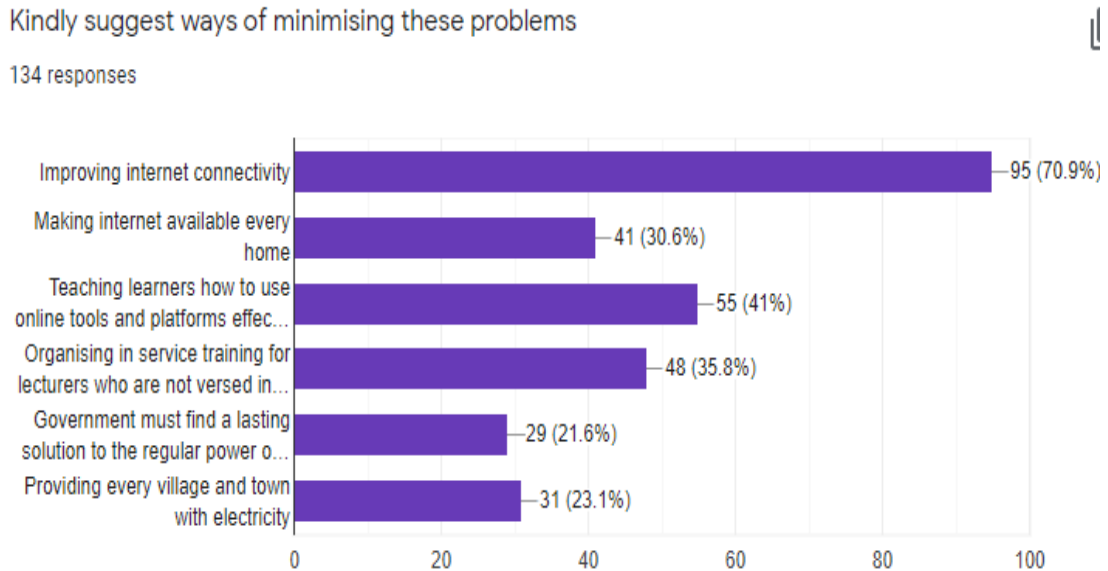
Ways of minimizing problems students encounter learning languages online	N	%
Improving internet connectivity	95	32
Teaching learners how to use online tools effectively	55	18
Organizing in service training for lecturers who are not well versed in LMS/online platforms	48	16
Making internet available every home	41	14
Providing every village and town with electricity	31	10

Government must find a lasting solution to the regular power outage	29	10
<b>Total</b>	<b>299</b>	<b>100</b>

Note. Created by authors.

**Figure 10.**

*Ways of minimizing problems students encounter learning languages online*



Note. Created by authors.

According to the participants, the problems that they usually encounter learning languages online should be minimized by improving internet connectivity (32%), teaching learners how to use online tools effectively (18%), organizing in-service training for lecturers who are not well-versed in LMS/online platforms(16%), making internet available every home (14%), providing every village and town with electricity (10%) and Government finding a lasting solution to the regular power outage (10%).

The study revealed mixed feelings among students regarding online language learning in Ghanaian higher education. Table 4 and Figure 6 show that 55.5% of participants enjoyed learning languages online, while 44.5% did not. Students who liked online language learning appreciated its flexibility, with 41.4% citing the ability to watch recorded lessons again and 25% valuing the time and energy saved from not commuting to campus. Others (19.3%) mentioned that online lectures could be as effective as face-to-face ones, especially when instructors were regular in their teaching (14.3%).

On the other hand, many students expressed dissatisfaction with online language learning, primarily due to data consumption (41.1%), the difficulty of learning languages online

(34%), and the costs involved (18.3%). Additionally, 6.6% noted that lecturers struggled to explain lessons adequately online (Table 6, Figure 8). Students also faced significant challenges while learning languages online, with 42% reporting poor internet connectivity and 18% pointing to the remoteness of internet access.

Other issues included a lack of technological skills (13%) and instructors' unfamiliarity with online platforms (12%), as shown in Table 7 and Figure 9. To address these challenges, students suggested improving internet connectivity (32%), providing training on online tools (18%), and offering in-service training for lecturers (16%). They also recommended making the internet and electricity more accessible across the country to facilitate online learning (Table 8, Figure 10).

The analysis revealed that students who rated teaching and social presence highly were significantly more likely to express positive attitudes toward online language learning (supporting H1).

Consistent with H2, students who reported frequent technical challenges, including poor connectivity and lack of access to digital tools, showed significantly lower satisfaction and motivation for online language learning.

Finally, H3 was also confirmed: students who received training in digital tools and language-specific strategies demonstrated greater confidence and fewer reported difficulties with online learning.

The current study supports some findings from previous research by Tabiri et al. (2022), Kokroko et al. (2020), and Alscher (2024), which also identified similar challenges in adopting online learning, such as connectivity issues and instructor difficulties with technology. However, this study differs in its broader focus on multiple languages, compared to earlier works that concentrated on French and English, and highlights unique challenges specific to Ghanaian tertiary education. The results also align with UNESCO's recommendations on using distance learning to minimize educational disruptions during the COVID-19 pandemic but underscore the superiority of conventional education in some cases (Basilaia & Kvavadze, 2020).

This study helps fill research gaps by examining online language learning in a developing country context. The Technology Acceptance Model (TAM), proposed by Davis (1989), offers a valuable lens through which the study's findings can be interpreted. TAM posits two main factors: Perceived Usefulness (PU) and Perceived Ease of Use (PEU) that can influence individuals' acceptance and use of technology. In the context of this study, Perceived

Usefulness (PU): This refers to students' belief that using online platforms for language learning enhances their academic performance, especially during a crisis like the COVID-19 pandemic. The study shows that students preferred learning languages online, suggesting that many students saw value in this mode of learning. However, the persistent challenges (e.g., internet instability, power outages, and low digital proficiency among both students and lecturers) likely diminish students' overall perception of the usefulness of online language learning.

Perceived Ease of Use (PEU): The study reveals that a significant portion of students and lecturers faced technological difficulties, indicating that the ease of use was compromised. Learners' lack of technological proficiency (13%) and instructors' unfamiliarity with online platforms (12%) directly relate to this construct. These barriers reduce the likelihood of sustained adoption of online learning technologies, as systems perceived as complex or difficult deter user engagement.

By aligning the study with TAM, it becomes clearer how students' perceptions and behaviors are shaped by their evaluation of both the benefits and the usability of online learning systems (Dutot, 2014). This theoretical grounding not only strengthens the interpretation of the findings but also enhances the study's contribution to existing research on technology use in education.

Practical implications emerge clearly from this study. Educational institutions in Ghana must strengthen their digital infrastructure and provide targeted training for instructors to effectively transition to blended or online language instruction. This includes equipping lecturers with not only technological skills but also pedagogical strategies that are effective in virtual environments. Additionally, policymakers and curriculum developers should consider integrating hybrid models that combine the strengths of both online and traditional education to enhance student engagement and learning outcomes.

Another critical implication involves the need for equity in access to digital education. Students from underserved or rural areas often struggle with internet connectivity and lack of digital devices, further exacerbating educational inequality. To bridge this gap, the government and stakeholders in the education sector should consider partnerships with telecom providers to offer subsidized data packages or zero-rated educational platforms for students.

Lastly, by focusing on a developing country context, this study contributes to a relatively under-researched area in global educational discourse. It offers context-specific insights that

can guide both national policy and international development efforts aimed at improving the resilience and inclusiveness of higher education systems.

### ***Contributions to the Research Field***

This study makes several key contributions to the field of online language education, particularly in the context of higher education in Ghana:

### ***Novel Comparative Evaluation of Asynchronous and Synchronous Platforms***

The study uniquely evaluates Moodle (asynchronous) and MS Teams (synchronous) together—an aspect that has not been extensively explored in existing literature. By examining these two distinct platforms side by side in the context of language learning, the research provides fresh insights into how each platform supports or hinders the acquisition of languages such as English, French, Spanish, Chinese, and Ghanaian languages during crisis-induced online transitions like the COVID-19 pandemic.

### ***Filling Gaps in Context-Specific Research***

While numerous studies have explored online learning in general, few have focused specifically on language education in sub-Saharan Africa during a global health crisis. This research addresses this gap by providing contextually grounded data on how undergraduate students in Ghana perceived and engaged with online language learning tools and environments. It highlights both learner and instructor-related challenges, offering a nuanced view of digital language education.

### ***Policy and Pedagogical Implications***

The study proposes practical, context-sensitive educational interventions aimed at improving the online language learning experience. These include infrastructure upgrades (internet and electricity), digital literacy training for students, and in-service training for lecturers. These recommendations offer actionable steps for educational stakeholders and policymakers not only in Ghana but also in other developing countries facing similar technological and pedagogical barriers.

### *Potential for Generalization*

Although the study is situated within a Ghanaian context, the challenges and findings reflect common difficulties encountered in other low-to-middle income countries transitioning to online education. Thus, the research has the potential to inform broader regional and international discourse on e-learning in language education, particularly in contexts with limited technological resources.

## **DISCUSSION AND CONCLUSION**

This study discusses extensively the perceptions of one hundred and thirty-eight university students, regarding learning languages like English, French, Spanish, Chinese and Ghanaian languages, who willingly participated in the study. The Community of Inquiry framework (Garrison et al., 1999; Savvidou et al., 2022), discloses that online learning is built on meaningful interaction that is in teaching presence to facilitate and support learning in a social environment to generate we-feeling among those participating in the online education.

The study supports some findings from previous research by Tabiri et al. (2022), Kokroko et al. (2020), and Alscher (2024), which also identified similar challenges in adopting online learning, such as connectivity issues and instructor difficulties with technology. However, this study differs in its broader focus on multiple languages, compared to earlier works that concentrated on French and English, and highlights unique challenges specific to Ghanaian tertiary education. The results also align with UNESCO's recommendations on using distance learning to minimize educational disruptions during the COVID-19 pandemic but underscore the superiority of conventional education in some cases (Basilaia & Kvavadze, 2020). This study helps fill research gaps by examining online language learning in a developing country context.

Adapting the Community of Inquiry framework model of online learning, the data gathered were analyzed using descriptive statistics. The results show that 55.5% of the participants responded that they like learning all aspects of languages online while 44.5% of the students did not like studying languages online. Also, 34% of the University students studied English online, 32% studied Ghanaian languages, 23% of the students studied French online, five per cent studied Spanish, two per cent studied Chinese online and four per cent of the students studied none of the five languages online. It has been found that learning languages online is bedevilled with countless problems (Ozfidan & Marks, 2025; Tabiri et al., 2022).

It was found that some of the challenges that students and instructors encounter in some language classrooms in the developing countries are mainly technological issues, such as the inability to use online teaching and learning resources wisely and a lack of technical know-how, such as bad internet connectivity (42%), remoteness of the internet source (18%), learners deficiency in technological skills (13%), lecturers/instructors unfamiliar with using the online platforms (12%), recurrent power outages (10%), and inability to provide electricity for use (5%).

Some pragmatic pedagogical measures were proposed to stakeholders as measures for finding lasting solutions to the problems. These recommendations are the government, stakeholders ability to improve upon internet connectivity, the institutions should create compulsory courses in information technology to help teach learners how to use online tools effectively, and there must be nationwide in-service-training for lecturers who are not versed in online platforms, and the possibility of making internet available in every home, electricity must be supplied to every village and town in this era and Government should find a lasting solution to the regular power outage to make online learning of languages efficient and attractive in higher education.

The findings of the current study might not be generalized due to the limited number of participants and selection of the participants. However, we conclude strongly that adopting technology in teaching and learning languages has become part and parcel of life at the tertiary level. Essentially, all educational institutions in Africa must have a backup system for all eventualities.

There should be the introduction of one general tool for facilitating the teaching and learning processes in all languages. Tools must also be adopted and /or adapted for online learning when it comes to teaching and learning languages like English, French, Spanish, Chinese and Ghanaian languages in developing countries. Research can be expanded to investigate all other expedient means in other discipline areas and embark on these measures to teach languages: English, French, Spanish, Chinese and African languages like Ghanaian languages online in higher education in Ghana so as to ensure teaching and learning of languages during any kind of pandemic.

## **RECOMMENDATIONS**

Based on the findings and limitations of this study, the following recommendations are proposed for policymakers, educational institutions, and language educators:

### *For Policymakers*

#### 1. Develop National Guidelines for Digital Language Education

Policymakers should collaborate with educational experts to develop and implement national guidelines and standards for the use of digital platforms in language education. These guidelines should cover pedagogical practices, content delivery, assessment, and monitoring systems to ensure uniformity and quality across institutions.

#### 2. Invest in Scalable and Inclusive Digital Infrastructure

To address the digital divide and ensure equitable access to language education, government investment is needed in infrastructure such as high-speed internet, learning management systems (LMS), and subsidized devices. Special provisions must be made to support students in rural or underserved areas.

#### 3. Adopt a Unified National Language Learning Platform

A centralized and government-endorsed digital tool or platform for teaching and learning languages (e.g., English, French, Spanish, Chinese, and Ghanaian languages) should be adopted. This platform should be accessible, user-friendly, multilingual, and capable of offline functionality to accommodate varying levels of internet availability.

#### 4. Mandate Technological Backup Plans Across Institutions

All tertiary institutions should be required to maintain robust digital backup systems to ensure learning continuity during future disruptions (e.g., pandemics, strikes, or natural disasters). This includes storing course content digitally, offering online training for lecturers, and building hybrid or fully online contingency models.

### *For Educators and Academic Institutions*

#### 1. Integrate Hybrid Language Learning Models into Curricula

Language departments should restructure their curricula to include hybrid learning strategies that blend face-to-face and online instruction. This not only prepares institutions for future disruptions but also fosters digital competence among students and lecturers.

#### 2. Customize Digital Tools for Local Language Instruction

Existing digital tools should be adapted or developed to accommodate the unique features of Ghanaian and other African languages. This includes incorporating culturally relevant content, voice recognition in local dialects, and appropriate orthographic systems.

### 3. Professional Development and Capacity Building

Regular training programmes must be organized to enhance instructors' digital pedagogical skills, especially in the context of language teaching. These should include workshops on using e-learning platforms, managing virtual classrooms, and applying interactive online teaching methods.

### 4. Encourage Interdisciplinary and Longitudinal Research

Research on digital language learning must be expanded to cover multiple languages and diverse student populations. Longitudinal studies should be encouraged to examine the long-term effects of online language instruction in higher education. Moreover, interdisciplinary collaboration with computer scientists and instructional designers can foster the development of innovative tools and applications.

### 5. Promote Content Sharing and Open Educational Resources (OERs)

Language educators should be encouraged to create and share open educational resources (OERs) across institutions. This will reduce duplication of efforts, promote best practices, and ensure that high-quality resources are available for all language programs, including African languages.

## REFERENCES

- Alscher, D. (2024, May 14). What is a webinar? How to engage and educate your audience. <https://learn.g2.com/what-is-a-webinar>
- Al-Zboon, K. O. M. (2020). The effectiveness of distance learning compared to direct education in the achievement of first-grade students in the Arabic language subject in Jordan. *Arab Journal of Specific Education*, 4(14), 201–220.
- Basilaia, G., & Kavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, 5(4), 1–9.
- Brown, J. C., & Park, H. (2015). Comparing student research competencies in online and traditional face-to-face learning environments. *TOJDEL: The Online Journal of Distance Education and e-Learning*, 3(1), 1–7.
- Candelaria, P. C. (2023). Online distance learning in the development of macro skills communication of selected private school in the district of Victoria, Laguna, Philippines. *International Journal of Education, Technology and Science*, 3(1), 1–15.
- Çalık, E. Ö., & Altay, I. F. (2021). Analysis of English lesson broadcasts during emergency remote teaching from pedagogical, instructional and technical aspects. *International Journal of Education, Technology and Science*, 1(2), 71–87.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–339. <https://doi.org/10.2307/249008>
- Dutot, V. (2014). Adoption of social media using technology acceptance model: The generational effect. *International Journal of Technology and Human Interaction*, 10(4), 18–35. <https://doi.org/10.4018/ijthi.2014100102>
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105.
- Huba, M. E., & Freed, J. E. (2000). Learner-centered assessment on college campuses: Shifting the focus from teaching to learning. *Community College Journal of Research and Practice*, 24(9), 759–766.
- Karsenti, T., Parent, S., & Cuerrier, M. (2020). L'école à la maison: La pandémie a-t-elle réellement exacerbé les iniquités sociales? *Éducation Canada*, 60(4), 4–9.
- Kokroko, E., & Addei, C. (2020). Teaching and learning French language in Ghana through digital resources: Prospects and challenges. *American Journal of Online and Distance Learning*, 2(2), 22–30.
- Madhavi, I. (2010). *Use of language laboratory in English language learning and teaching*. Institute of Management, GITAM University.

- Mahat, H., Norkhaidi, S. B., Hashim, M., Saleh, N., Nayan, N., Abdullah, N. H. L., Baharudin, N. H., & Jamhari, N. (2021). Determining the effectiveness of pre-university students' online learning in geography subject using relative importance index. *Pegem Journal of Education and Instruction*, 11(4), 160–168.
- Ozfidan, B., & Marks, J. M. (2025). Perceptions of Saudi undergraduate students' experiences toward online and traditional learning: Mixed method study. *International Journal of Education, Technology and Science*, 5(1), 47–61. <https://doi.org/10.5281/zenodo.14904948>
- Paul, J., & Jefferson, F. (2019). A comparative analysis of student performance in an online vs face-to-face environmental science course from 2009 to 2016. *Frontiers in Computer Science*, 1, Article 7. <https://doi.org/10.3389/fcomp.2019.00007>
- Parahoo, K. (1997). *Nursing research: Principles, process, and issues*. Palgrave Macmillan.
- Ritonga, M. (2020). Learning from home (LFH) dan kerinduan yang mendalam. In *Inovasi pembelajaran era Covid-19: Pengalaman & pengamatan selama pandemi Covid-19* (pp. 80–83). CV Markumi.
- Savvidou, C., & Katarzyna, A. (2022). “It has potential but...”: Exploring university students' experiences and perceptions of breakout rooms during the COVID-19 pandemic. *Teaching English with Technology*, 22(2), 3–26. <http://www.tewtjournal.org>
- Shaughnessy, J. J., Zechmeister, E. B., & Zechmeister, J. S. (2012). *Research methods in psychology* (9th ed.). McGraw-Hill.
- Tabiri, M. O., Jones-Mensah, I., Fenyi, D. A., & Asunka, S. (2022). Challenges of online learning of English/French language in higher education in Ghana. *Journal of Language and Linguistic Studies*, 18(1), 207–222. <https://doi.org/10.52462/jlls.176>
- Tabiri, M. O. (2021). L'enseignement/apprentissage en ligne du français langue étrangère au Ghana: Quels avantages d'un recours au numérique? *Akofena*, 4(3), 195–200.
- University World News. (2021). Ghana, Senegal closes all universities. <https://www.universityworldnews.com/post.php?story=20200315115142951>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

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