

Effectiveness of Medical French Training in Developing Communicative Competence Among Health Professional Students in Ghana

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Abstract

This study examined the integration of Medical French into the training of health professionals in Ghana in response to the growing need for effective cross-border healthcare communication within the multilingual ECOWAS region. Despite the increasing relevance of French proficiency for healthcare delivery, professional mobility, and communication with Francophone patients, limited empirical research has assessed the effectiveness of Medical French instruction in Anglophone health professional education. Guided by Stufflebeam's CIPP (Context, Input, Process, Product) evaluation model, the study adopted a quantitative descriptive design involving 176 students from the Schools of Pharmacy, Nursing, Midwifery, and Allied Sciences in a public university in Ghana. Data were collected through a structured questionnaire based on the CIPP framework (Cronbach's $\alpha = 0.92$) and analyzed using descriptive statistics and one-way ANOVA. Findings showed strong recognition of the relevance of Medical French for communication with Francophone patients, healthcare practice in border communities, regional collaboration, and international employment opportunities. However, respondents perceived institutional support and instructional resources as inadequate, limiting practical immersion and authentic communicative experiences. Although teaching strategies were considered moderately effective, students reported relatively low confidence in their communicative competence in clinical situations. ANOVA results indicated no statistically significant differences in communicative performance across fields of study, suggesting comparable competence levels among students. The study recommends curriculum reforms emphasizing experiential learning, clinical immersion, and cross-border partnerships to strengthen communicative competence and enhance healthcare delivery within the ECOWAS sub-region.

Introduction

In the field of healthcare, communication is crucial in achieving effective health outcomes [1]. The introduction of French language instruction into the curricula of health training schools in Ghana forms part of a broader effort to develop French linguistic competence of healthcare professionals in order to improve the effectiveness of healthcare delivery to French-speaking clients visiting Ghanaian health facilities. The primary objective of this initiative is therefore to enable Ghanaian health professionals to communicate effectively with patients and healthcare professionals from neighboring francophone countries such as Côte d'Ivoire, Togo, and Burkina Faso. Furthermore, the teaching of French to healthcare personnel seeks to strengthen intercultural competence, promote regional integration within ECOWAS (whose membership is largely made up of francophones), and improve the quality of cross-border healthcare services. In this regard, Kalu and Umukoro [2] observe that learning specialized French, particularly medical French, allows health professionals to access continuing education in French-speaking countries and broaden their field of competence

Consequently, the integration of French into nursing and other health professional training institutions in Ghana aligns with the functional and pragmatic perspective of language teaching aimed at improving professional communication and healthcare delivery in sub-Saharan Africa. This integration however raises an important question: How effective is the teaching and learning of medical French in the health training schools?

Effective teaching and learning encompass a range of pedagogical practices, instructional strategies, and institutional conditions designed to improve learners' academic outcomes [3]. Cuq and Gruca [4] define effectiveness of teaching as a central criterion in the evaluation of teaching methods and pedagogical systems. From their perspective, effectiveness refers to the ability of a teaching method or system to achieve

predetermined pedagogical objectives, particularly in terms of language acquisition. Likewise, Slavin, Lake [5] define effective teaching as all instructional practices that produce significant and measurable improvement in learners' performance. The authors further argue that teaching is effective when it maximizes learning opportunities, actively engages learners, and incorporates continuous assessment to refine instructional practices. Bressoux [6] adds that teaching effectiveness depends largely on the teacher's capacity to facilitate lasting, transferable, and socially relevant learning. For him, the teacher remains a principal determinant of effectiveness of teaching. Similarly, Kyriacou [7] describes effective teaching as an intentional activity aimed at producing successful learning outcomes among students. This definition highlights the strategic role of the teacher, the clarity of objectives, the adaptability of teaching methods, and sensitivity to learners' needs.

Taken together, these definitions suggest that effective teaching is a planned, evaluated, and contextualized process grounded in continuous interaction between pedagogical actors and learning content. It relies on evidence-based practices to adjust instruction and respond to learners' diverse needs. Effective teaching therefore extends beyond the mere transmission of knowledge; it seeks to develop competencies, foster learner autonomy, and create a classroom climate conducive to learning. Hattie [8], in his meta-analysis, emphasizes that feedback, clarity of objectives, and learner self-assessment are among the key elements of effective teaching.

The concept of effective teaching and learning remains open to debate because numerous teaching methods exist, and their effectiveness depends on several factors that are often difficult to assess objectively. Nevertheless, some pedagogical practices have consistently proven successful in facilitating the transmission and assimilation of academic knowledge. According to Kyriacou [7], the variables that determine teaching and learning effectiveness include context variables, product variables, and process variables. However, among the many variables identified in the literature, the teacher factor which is associated with the process variable remains central in improving learners' communicative competence. Indeed, the teacher is often viewed as the bridge that makes teaching and learning effective [9]. In this sense, the teacher is the principal actor whose consistent and rational pedagogical practices lead to positive learning outcomes.

The teacher is the individual who directs and facilitates classroom activities. In foreign language classrooms, teachers display behaviors that significantly contribute to effective teaching and learning. Saleh [10] identifies five essential classroom behaviors associated with effective teaching: lesson clarity, pedagogical variety, task orientation, learner engagement, and learner achievement rate. Teaching and learning processes that incorporate these behaviors are more likely to be effective because ideas and concepts are presented clearly, thereby facilitating understanding. Effective teaching also involves the use of diverse pedagogical strategies, among which questioning is particularly important [10]. Through varied questioning techniques, classroom interaction increases, encouraging greater learner participation and engagement. Concerning task orientation, Saleh [10] explains that sufficient instructional time is essential for learners to assimilate content properly, develop targeted competencies, and strengthen the cognitive, affective, and psychomotor domains of learning.

Another important factor contributing to teaching effectiveness is learner engagement in the learning process [7]. Interaction between teachers and learners, as well as among learners themselves, plays a significant role in determining the effectiveness of instruction. Skinner and Belmont [11] define engagement as the active, persistent, and goal-directed investment learners demonstrate in learning activities. Fredricks, Blumenfeld [12] identify three dimensions of engagement: behavioral engagement, emotional engagement, and cognitive

engagement. Behavioral engagement involves active participation and adherence to classroom rules; emotional engagement refers to learners' feelings of belonging, enjoyment, or interest; and cognitive engagement concerns mental investment, learning strategies, and intellectual autonomy. Effective teaching cannot therefore be conceived without sustained attention to learner engagement. Hattie [8] identifies active learner involvement as one of the strongest predictors of academic success, while Rosenshine [13] emphasizes that interactivity and guided questioning stimulate learners' cognitive engagement. To develop communicative competence in the target language, learners must participate actively during classroom activities. Teachers, in turn, play a crucial role in creating a climate conducive to engagement through clear instructions, encouragement, regular feedback, and recognition of effort [7]. Consequently, engaged learners are more likely to persevere, participate actively, and adopt effective learning strategies. Classroom engagement thus represents a key mechanism for optimizing teaching and learning. Effective teaching is ultimately characterized by its ability to stimulate curiosity, sustain attention, and maintain motivation over time.

Classroom activities further enable learners to work individually or collaboratively, as emphasized by Ouedraogo [14]. According to him, group work strengthens learners' communication skills by allowing them to construct knowledge collectively through interaction. Such collaborative learning reflects Vygotsky's socioconstructivist theory, according to which knowledge is constructed within a social context [14]. Ouedraogo also draws on the work of Perret-Clermont, Doise, and Mugny, who argue that sociocognitive conflict constitutes a major factor in intellectual development and learning. Finally, learner achievement rate is another important indicator of teaching effectiveness, as it reflects learners' understanding, responses to questions, and ability to complete assigned tasks successfully. Ultimately, effective teaching can only be achieved through the active participation of both teachers and learners working toward common educational objectives through appropriately designed classroom activities.

Problem Statement

French is taught in several health training institutions in Ghana, including the Schools of Nursing, Midwifery, Allied Health Sciences, and Pharmacy. Since the introduction of French into these training programmes in 2015, limited empirical research has examined the effectiveness of Medical French instruction in Ghanaian health professional education. Existing studies have focused on areas such as the challenges and prospects of teaching medical translation [15], the teaching of French in medical fields [16], the French language needs of medical learner [17] and healthcare personnel's experiences with French-speaking refugees in Ghana [18]. While these studies contribute to the growing scholarship on language and healthcare communication, they do not comprehensively evaluate the effectiveness of Medical French instruction within Ghanaian health training institutions.

In the context of increasing regional integration within the ECOWAS sub-region and the growing movement of patients and health professionals across linguistic boundaries, communicative competence in French has become increasingly important for healthcare delivery, professional collaboration, and patient-centered care. However, concerns remain regarding the adequacy of pedagogical resources, instructional strategies, and practical communicative training opportunities available to students studying Medical French. Inadequate

preparation in Medical French may limit students' ability to communicate effectively with Francophone patients, participate in cross-border healthcare initiatives, and access international professional opportunities.

Despite the strategic importance of Medical French, no known empirical study in Ghana has comprehensively evaluated the programme using a structured educational evaluation framework such as Stufflebeam's CIPP (Context, Input, Process, Product) model. It is therefore necessary to assess the effectiveness of Medical French instruction in Ghanaian health training institutions in order to identify strengths, address existing gaps, and improve learning outcomes and communicative competence among future health professionals.

The present study therefore seeks to answer the following research questions:

1. What are students' perceptions regarding the usefulness of Medical French in their professional development?
2. To what extent are the pedagogical resources available for teaching Medical French adequate?
3. To what extent do the strategies adopted for teaching Medical French promote learner engagement?
4. How does the teaching of Medical French in Ghana prepare students to interact with French-speaking patients?

Theoretical framework

The present study adopts Stufflebeam's CIPP (Context, Input, Process, and Product) Model (2000) as its theoretical framework. This decision-oriented and systemic model provides guiding principles for the planning, improvement, and evaluation of educational programs. According to Stufflebeam [19], the primary objective of evaluation is "not to prove, but to improve." By examining the current state of the Medical French Program, the CIPP model makes it possible to identify the needs of stakeholders (learners, lecturers, institutions, and policymakers) while ensuring that essential resources are provided for program success.

Context evaluation, according to Stufflebeam [19], is a fundamental process for identifying needs, problems, and opportunities within an educational environment. It ensures that pedagogical practices correspond to the characteristics and needs of the target population. This stage also considers the influence of the school and community environment on the educational program. The identified needs are then documented and addressed through curriculum development and instructional materials [20].

Input evaluation constitutes another essential component of the model. It involves assessing the resources necessary for successful program implementation, including human, material, infrastructural, and curricular resources, as well as scheduling and institutional constraints. Stufflebeam [19] emphasizes that the purpose of input evaluation is to determine whether adequate resources are available and effectively utilized to achieve educational objectives. These resources form the foundation upon which teaching and learning processes are built and significantly influence educational quality and outcomes.

At the process level, attention is directed toward the implementation of the program and the influence of contextual and input variables on learning outcomes. In other words, process evaluation examines how the program functions in practice. Mokhtarzadegan, Amini [21] note that successful implementation largely depends on the effective integration of context and input variables. Hattie [8] similarly argues that effective teaching depends on the implementation of evidence-based instructional strategies that foster learner

engagement, conceptual understanding, and critical thinking. In the context of this study, the teaching of French to health professionals seeks primarily to develop communicative competence, which can be facilitated through classroom interaction and active learner participation. Their ability to interact in French therefore is considered a function of teaching strategies.

The final component of the CIPP Model is product evaluation. This stage examines the extent to which the predetermined objectives of the educational program have been achieved. According to Stufflebeam [19], product evaluation assesses both desirable and undesirable outcomes in order to determine program strengths and weaknesses. Importantly, evaluation occurs not only at the end of the program but also throughout its implementation, thereby enabling continuous improvement through regular feedback and assessment.

Although ongoing evaluation of French language teaching would already provide valuable feedback to both teachers and learners, the present study, guided by the CIPP model seeks specifically to assess the effectiveness of the Medical French Program at the university level in Ghana by identifying its strengths and limitations with a view to improving its implementation. The methodological procedures adopted for this purpose are presented below.

Methodological Procedures

This study employed a quantitative descriptive research design to evaluate the effectiveness of Medical French instruction among health professional students in a public university in Ghana. The study was conducted in selected health-related schools within the university, namely the School of Pharmacy, the School of Nursing and Midwifery and the School of Health and Allied Sciences. However, the participants for the study were drawn from programmes in which Medical French was actively taught, specifically General Nursing, Midwifery, Pharmacy, and selected Allied Health programmes. The study population consisted of 1,077 students, including 127 General Nursing students, 121 Midwifery students, and 829 Pharmacy students. A total of 176 respondents participated in the study. Participants were selected using a convenience sampling technique based on accessibility and willingness to participate after informed consent had been obtained. Data were collected using a structured questionnaire developed based on Stufflebeam's CIPP (Context, Input, Process, Product) Evaluation Model (2000). The first section of the questionnaire collected demographic information, including gender, age, educational level, and field of study, as well as students' perceptions regarding the usefulness of Medical French for future healthcare professionals. The second section examined the adequacy of pedagogical resources available for teaching and learning Medical French. The third and fourth sections focused on teaching strategies and students' perceived ability to use French in authentic clinical situations.

Questionnaire items were measured on a five-point Likert scale ranging from 1 = Very Low, 2 = Low, 3 = Average, 4 = High, and 5 = Very High. A mean score below 3.00 was interpreted as indicating low effectiveness, while a mean score of 3.00 or above indicated moderate to high effectiveness. The reliability of the instrument was established using Cronbach's alpha coefficient, which yielded a value of 0.92, indicating a high level of internal consistency. Content validity was ensured through expert review by specialists in language education and research methodology. The questionnaire was administered electronically using Google Forms, and the data collected were analyzed using descriptive statistical techniques, including frequencies, percentages, means, and standard deviations. Inferential statistics, specifically one-way Analysis of Variance (ANOVA), were also

employed to determine whether significant differences existed in communicative competence of students across fields of study.

Regarding ethical considerations, participants were informed that their participation was entirely voluntary, and informed consent was obtained from all respondents before data collection. Participants were adequately informed about the purpose of the study, their rights, and the intended use of the data collected. Confidentiality and anonymity were strictly maintained, and all information obtained was securely stored and used solely for research purposes in accordance with ethical guidelines and data protection regulations. Participants were also informed of their right to decline answering any question or withdraw from the study at any stage without any negative consequences.

Results

This session presents the results of the study on the integration of Medical French into health training institutions in Ghana. The results are organized according to the study’s research questions and structured around the four key dimensions of effectiveness of medical French investigated: *utility of medical French, resource availability, teaching strategies, and learner ability to interact with francophones.*

Table 1
Demographic data

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender		4	2.3	2.3	2.3
	Female	100	56.8	56.8	59.1
	Male	71	40.3	40.3	99.4
	Prefer not to say	1	.6	.6	100.0
	Total	176	100.0	100.0	
Field of study	General Nursing	35	19.9	20.1	20.1
	Midwifery	56	31.8	32.2	52.3
	Pharmacy	50	28.4	28.7	81.0
	Allied Health	33	18.8	19.0	100.0
	Total	174	98.9	100.0	
Missing	System	2	1.1		
Total		176	100.0		

Gender Distribution

Table 1 shows that majority of respondents were female, representing 100 participants (56.8%), while 71 respondents (40.3%) were male. One respondent (0.6%) preferred not to disclose their gender. Additionally, four

responses (2.3%) were unclassified or missing under the gender category. The findings indicate that female students constituted the dominant proportion of the study sample, reflecting the gender composition commonly observed in health professional training programmes, particularly in nursing and midwifery.

Field of Study Distribution

Regarding respondents' fields of study from Table 1, Midwifery students constituted the largest group, with 56 participants (32.2%), followed by Pharmacy students with 50 respondents (28.7%). General Nursing students accounted for 35 respondents (20.1%), while Allied Health students represented 33 respondents (19.0%). Two responses (1.1%) were missing for this variable. The distribution demonstrates that the study captured perspectives from diverse health professional programmes, thereby enhancing the representativeness of the findings across healthcare disciplines.

The first research question sought to find out students' views regarding the usefulness of medical French in their professional development. The results are presented in Table 2.

Table 2
Students' views of the utility of Medical French

Code	Item	SD	D	N	A	SA	M	SD
u1	Including French in the health curriculum would improve communication with patients from neighboring Francophone countries.	13 (7.6%)	20 (11.8%)	30 (17.6%)	37 (21.8%)	70 (41.2%)	3.77	1.306
u2	Learning French is essential for health professionals working in border regions of Ghana.	11 (6.5%)	14 (8.3%)	30 (17.8%)	37 (21.9%)	77 (45.6%)	3.92	1.246
u3	French language skills would enhance opportunities for international collaboration in healthcare.	26 (15.3%)	28 (16.5%)	43 (25.3%)	33 (19.4%)	40 (23.5%)	3.19	1.373
u5	French proficiency would increase the effectiveness of cross-border disease control efforts.	14 (8.2%)	25 (14.6%)	33 (19.3%)	30 (17.5%)	69 (40.4%)	3.66	1.337
u6	I would feel more confident treating Francophone patients if I had formal training in French.	13 (7.7%)	29 (17.3%)	36 (21.4%)	40 (23.8%)	50 (29.8%)	3.67	1.350
U7	Access to French medical literature would improve evidence-based practice among Ghanaian health professionals.	16(9.1)	31 (17.6%)	42(23.9)	39 (22.2)	39(22.2)	3.51	1.290

Code	Item	SD	D	N	A	SA	M	SD
u8	The benefits of learning French outweigh the time and effort required to integrate it into the curriculum.	13 (7.7%)	21 (12.5%)	30 (17.9%)	36 (21.4%)	68 (40.5%)	3.32	1.281
u9	Proficiency in French would improve my chances of working with international health organizations.	13 (7.7%)	20 (11.9%)	35 (20.8%)	42 (25.0%)	58 (34.5%)	3.74	1.313
u10	Training in French would contribute to better regional integration in West African healthcare delivery	12 (7.1%)	16 (9.5%)	35 (20.8%)	39 (23.2%)	66 (39.3%)	3.67	1.275
	Including French in the health curriculum would improve communication with patients from neighboring Francophone countries.						3.6215	1.172
Mean of Means/Standard deviation							3.61	1.31

From Table 2, the results indicate generally positive attitudes toward the integration of French into the health curriculum, with mean scores ranging from 3.19 to 3.92 and a composite mean of 3.61 (SD = 1.13). The overall mean score (M = 3.61) suggests that students moderately agree that Medical French is useful. Most items recorded mean scores above the midpoint (3.00), indicating favorable perceptions of its practical, professional, and regional relevance. Standard deviations ranging from 1.246 to 1.373 suggest moderate variability in responses, meaning that while a majority hold positive views, some students remain uncertain or skeptical.

Some reasons were given for the positive attitudes toward the integration of French into the health curriculum. From Table 1, the most important reason why respondents thought it was important to integrate the French language in the curriculum include the essential role the language plays among border health professionals in providing healthcare. This idea was shared by most of the respondents (67%, with a mean score of 3.92). This implies that students perceive French proficiency as particularly critical for professionals working in border regions of Ghana. The high mean and relatively lower SD (Mean = 3.92, SD = 1.31) indicate strong consensus. This reflects awareness of cross-border patient mobility and the need for linguistic competence in regional

healthcare delivery to ensure inclusivity. The second most important reason is directly linked to the first (use of French in the border regions of Ghana) and has to do with improving communication with Francophone patients (Mean = 3.77). A large proportion of students (63%) agreed or strongly agreed that including French in the health curriculum would improve communication with patients from neighboring Francophone countries. This strong endorsement reflects Ghana's geographic proximity to French-speaking countries such as Côte d'Ivoire, Burkina Faso, and Togo with the possibility of receiving clients from even far away francophone countries like Mali, Niger among others in the sub region. These results suggest that students recognize the practical communication benefits of French in cross-border healthcare contexts. The third most important reason why students agreed that French should be integrated into the curriculum is that, having proficiency in French improves one's employment prospects in international organizations such as UNDP, UNHCR among others. Nearly 60% agreed or strongly agreed on this position (M = 3.74, SD = 1.313). This pattern suggests that students value practical and immediate applications of the French language, (communication in French, border work, employment in international institutions) more strongly than broader academic or global collaboration dimensions.

The second research question sought to examine the availability and adequacy of teaching/learning resources for the implementation of medical French curriculum in the health training institutions in Ghana. The findings are presented in Table 3.

Table 3
Resource availability

Code	Item	SD	D	N	A	SA	M	SD
ra1	Teaching materials (e.g., textbooks, audio tools, video tools, simulation content) for Medical French are readily accessible.	27 (16.1%)	39 (23.2%)	48 (28.6%)	23 (13.7%)	31 (18.5%)	2.95	1.326
ra2	Institutional support from medical and health training schools is strong enough to sustain the introduction of Medical French.	27 (16.1%)	45 (26.8%)	42 (25.0%)	30 (17.9%)	24 (14.3%)	2.88	1.286
ra3	Technology and e-learning platforms are available and suitable for delivering Medical French content.	17 (10.1%)	44 (26.2%)	47 (28.0%)	32 (19.0%)	28 (16.7%)	3.06	1.237
ra4	There is collaboration between linguistics and medical departments to ensure content relevance and accuracy.	31 (18.5%)	37 (22.0%)	47 (28.0%)	24 (14.3%)	29 (17.3%)	2.90	1.339
ra42	There are partnerships with Francophone hospitals or institutions to support medical French immersion programs.	31 (18.6%)	37 (22.2%)	51 (30.5%)	22 (13.2%)	26 (15.6%)	2.85	1.306
ra6	Funding is available to support student participation in international or regional Medical French internships.	51 (30.7%)	38 (22.9%)	38 (22.9%)	16 (9.6%)	23 (13.9%)	2.53	1.378
ra7	There is a structured plan to integrate immersion experiences into the Medical French curriculum	35 (21.2%)	45 (27.3%)	39 (23.6%)	25 (15.2%)	21 (12.7%)	2.71	1.307
ra8	Opportunities exist for students to practice Medical French in real-life clinical settings with Francophone patients.	30 (18.1%)	33 (19.9%)	50 (30.1%)	23 (13.9%)	30 (18.1%)	2.94	1.338
ra9	The curriculum includes provisions for community-based internships in Francophone-speaking border regions of Ghana.	26 (15.6%)	38 (22.8%)	47 (28.1%)	32 (19.2%)	24 (14.4%)	2.94	1.274

Code	Item	SD	D	N	A	SA	M	SD
ra 10	There is institutional support for faculty and student exchange programs with Francophone health institutions	36 (21.8%)	39 (23.6%)	42 (25.5%)	23 (13.9%)	25 (15.2%)	2.77	1.346
Mean of Means/Standard deviation							2.84	1.134

From Table 3, resource availability and adequacy obtained a composite mean score of 2.84 (SD = 1.13), which falls below the neutral midpoint (3.00). This indicates that students generally perceive resource availability as inadequate or insufficient to sustain the effective integration of Medical French into the health curriculum. Compared to the earlier dimension on perceived utility (which showed strong agreement), this section reflects structural and institutional weaknesses that could hinder implementation. The below average performance of this variable suggests that while students recognized the value of Medical French, they perceived significant limitations in infrastructure, funding, partnerships, and institutional readiness.

The weakest areas of resource inadequacy include funding for internships, structured immersion planning (ra7) and exchange programs (ra10). With regards to funding for internship, a majority representing 53.6% (M = 2.53, SD = 1.378) disagreed that funding was available for international or regional internships. Funding was therefore perceived as the most significant constraint. Without financial support, experiential learning opportunities remained limited. The relatively high SD indicates diverse experiences, but overall sentiment was strongly negative. Structured immersion planning obtained a mean score of 2.71, (SD = 1.307) less than the midpoint, suggesting that such an intervention was either absent or poorly communicated. As far as faculty and student exchange programmes are concerned, 45.4% of respondents disagreed that exchange programs are institutionally supported. Respondents viewed this absence or inadequacy as limiting exposure and experiential learning. Overall, respondents were of the view that financial, structural, and partnership-based resources, were the weakest areas of resource inadequacy while technological infrastructure appeared comparatively more promising.

The third research question examined how strategies adopted for teaching medical French promote learner engagement. The findings are presented in Table 4.

Table 4
Teaching strategies

Code	Item	SD	D	N	A	SA	M	SD
ts1	Lessons incorporate real-life clinical scenarios in French to make learning more engaging and relevant.	17 (10.5%)	46 (28.4%)	41 (25.3%)	32 (19.8%)	26 (16.0%)	3.02	1.246
ts2	Students are encouraged to participate in role-plays and dialogues that simulate doctor–patient interactions.	18 (11.2%)	30 (18.6%)	44 (27.3%)	34 (21.1%)	35 (21.7%)	3.24	1.292
ts3	Multimedia tools (e.g., videos, audio clips, flashcards) are effectively used to enhance learner interest	16 (10.1%)	39 (24.5%)	37 (23.3%)	36 (22.6%)	31 (19.5%)	3.17	1.279
ts4	The instructor regularly checks for understanding and adapts the teaching pace to student needs.	18 (11.2%)	28 (17.4%)	39 (24.2%)	41 (25.5%)	35 (21.7%)	3.29	1.292
ts5	Peer learning strategies, such as pair or group work, are used to promote active engagement.	17 (10.5%)	31 (19.1%)	43 (26.5%)	34 (21.0%)	37 (22.8%)	3.27	1.294
ts6	Students are given frequent opportunities to speak, listen, read, and write in French during lessons.	14 (8.8%)	29 (18.1%)	49 (30.6%)	30 (18.8%)	38 (23.8%)	3.31	1.259
ts7	Tasks and exercises are designed to be both educational and enjoyable, increasing learner motivation.	15 (9.3%)	28 (17.4%)	45 (28.0%)	38 (23.6%)	35 (21.7%)	3.31	1.251
Mean of means and Standard Deviation							3.23	1.15

Table 4 shows that Teaching Strategies dimension of effective teaching of medical French obtained a composite mean of 3.23 (SD = 1.15), indicating a moderately positive perception of instructional approaches used in Medical French. All items obtained mean scores above the neutral midpoint (3.00) suggesting that students generally viewed the teaching strategies adopted as appropriate, though not exceptionally strong.

Among the individual items measuring this construct, *Opportunities to Practice Language Skills* obtained the highest mean score of 3.31 (SD = 1.259) with 42.6% agreement and 26.9% disagreement among respondents. This suggests that students perceived relatively frequent opportunities to practice speaking, listening, reading, and writing implying a balanced skill integration in the teaching/learning process. On the other hand,

authenticity and consistent integration of real-life clinical scenarios appeared comparatively weaker as the level of agreement (35.8%) was slightly lower than disagreement (38.9%), with 25.3% neutral. Compared to earlier dimensions measured, pedagogical strategies as a construct was more positively perceived than resource availability but less strongly endorsed than perceived utility.

The fourth research question sought to assess learners' ability to interact with francophones, after going through the Medical French Programme. Table 5 presents the findings.

Table 5
Learner ability to interact with Francophone clients

Code	Item	SD	D	N	A	SA	M	SD
la1	Medical French lessons have improved my ability to take patient histories from Francophone patients.	21 (12.3%)	41 (24.0%)	60 (35.1%)	26 (15.2%)	23 (13.5%)	2.94	1.194
la2	The course has equipped me with the vocabulary needed to explain medical procedures in French.	16 (9.4%)	51 (29.8%)	60 (35.1%)	21 (12.3%)	23 (13.5%)	2.91	1.154
la3	I feel confident communicating basic medical information to Francophone patients.	21 (12.4%)	43 (25.4%)	62 (36.7%)	18 (10.7%)	25 (14.8%)	2.90	1.203
la4	The lessons include practical exercises (e.g., role-plays or simulations) that reflect real clinical interactions with Francophone patients.	19 (11.2%)	42 (24.7%)	60 (35.3%)	25 (14.7%)	23 (13.5%)	2.95	1.182
la5	The program has increased my cultural awareness and sensitivity when dealing with Francophone patients.	22 (12.9%)	36 (21.2%)	53 (31.2%)	33 (19.4%)	26 (15.3%)	3.03	1.242
la7	The Medical French curriculum includes phrases and questions useful for emergencies and first contact situations.	20 (12.0%)	31 (18.6%)	58 (34.7%)	28 (16.8%)	29 (17.4%)	2.95	1.234
la8	I have learned how to give medication instructions clearly in French.	26 (15.6%)	39 (23.4%)	45 (27.0%)	27 (16.2%)	29 (17.4%)	3.08	1.243
la9	My ability to build rapport and trust with Francophone patients has improved as a result of the lessons.	20 (12.0%)	35 (21.0%)	54 (32.3%)	29 (17.4%)	28 (16.8%)	2.96	1.312
la10	The Medical French course has prepared me to handle basic interpretation or translation in clinical settings.	19 (11.0%)	28 (16.2%)	62 (35.8%)	34 (19.7%)	27 (15.6%)	3.06	1.240
Mean of means/Standard deviation							2.9837	1.079

It is observed from Table 5 that *Learner ability to interact with francophones* recorded a composite mean of 2.98 (SD = 1.08), which is slightly below the neutral midpoint (3.00). This suggests that while teaching strategies are moderately positive (M = 3.23, SD = 1.15), they do not translate into communicative competence and confidence among learners. This gap could be explained by the fact that neutral responses are notably high across most items (31–36%), indicating uncertainty about actual skill acquisition. In addition, practical communication skills such as history taking (M = 2.94, SD = 1.194), explaining procedures (M = 2.91, SD = 1.154), and emergencies and first aid contact (M = 2.95, SD = 1.234) received lower ratings.

The Levene's Test of Homogeneity of Variances was conducted to determine whether the variances in communicative competence scores were equal across the different fields of study. The results are presented in Table 6.

Table 6
Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.511	3	166	.214

The results showed that the test was not statistically significant, Levene Statistic = 1.511, $df(2, 166) = 1.511$, $p = .214$. Since the significance value ($p = .214$) is greater than the conventional alpha level of .05, the assumption of homogeneity of variances was not violated. This indicates that the variances in communicative competence scores among General Nursing, Midwifery, Pharmacy, and Allied Health students were relatively equal. The result therefore confirms that the data met one of the key assumptions required for conducting a One-Way Analysis of Variance (ANOVA).

Consequently, a One-Way Analysis of Variance (ANOVA) was conducted to examine whether significant differences existed in communicative competence among students from the various fields of study, namely General Nursing, Midwifery, Pharmacy, and Allied Health Sciences. The results are presented in Table 7.

Table 7
ANOVA

Between Groups	Sum of Squares	df	Mean Square	F	Sig.
	4.871	3	1.624	1.433	.235
Within Groups	188.121	166	1.133		
Total	192.991	169			

The results in Table 7 reveal that there was no statistically significant difference in communicative competence across the different fields of study, $F(3, 166) = 1.433$, $p = .235$. Since the significance value ($p = .235$) is greater than the alpha level of .05, the indication is, that students' communicative competence in Medical French did not differ significantly according to their academic discipline.

Although descriptive statistics showed slight variations in communicative competence, with General Nursing students recording the highest mean score and Allied Health students recording the lowest, these differences were not large enough to reach statistical significance. This suggests that students across the various health

programmes experienced relatively low levels of communicative competence in Medical French. The generally near moderate mean scores across all groups also suggest that communicative competence remains an area requiring further improvement irrespective of discipline.

Overall, the ANOVA results indicate that field of study was not a significant factor influencing communicative performance among the respondents. This highlights the need for broader curriculum and instructional improvements that target all health professional students rather than discipline-specific interventions alone.

Discussion

The key findings of the study are summarised in Table 5 in line with the CIPP Model which was adopted as the framework for the study.

Table 8
Summary of Key findings

CIPP Component	Study Dimension	Mean	Evaluation
Context	Utility	3.62	Strong justification
Input	Resources	2.84	Weak institutional readiness
Process	Teaching Strategies	3.23	Moderately effective implementation
Product	Learner Ability to interact with francophones	2.98	Moderate/limited outcomes

The *Utility* dimension in Table 8 aligns closely with *Context Evaluation* of the CIPP model of Stufflebeam [19]. On this construct, students strongly endorsed the relevance of Medical French with a composite mean of 3.62. The reasons for the endorsement of the integration of medical French in the health training curriculum include the need for communication with Francophone patients, work in border regions of Ghana, regional healthcare integration and employment with international organizations. This indicates a clearly identified contextual need within Ghana’s multilingual and cross-border healthcare environment. The high utility scores suggest that the program is well justified in terms of socio-professional demands. The contextual analysis confirms that the introduction of Medical French responds to genuine environmental and professional needs of students. These results strongly reflect Instrumental Motivation Theory as advanced by Gardner [22] in his socio-educational model of second language acquisition. Students appear primarily motivated by practical benefits, career advancement, employability, and clinical effectiveness rather than integrative or cultural assimilation goals. The strong utility scores indicate high motivational readiness. However, motivation alone does not guarantee successful language acquisition without adequate input, practice, and institutional support.

Resource availability, which corresponds to *Input Evaluation* [19] recorded the lowest overall mean (2.84) despite the strong perceived utility. Key deficiencies identified include limited funding for internships, weak institutional and administrative support, insufficient partnerships with Francophone institutions and lack of structured immersion plans. According to the CIPP model, effective program implementation requires sufficient resources and strategic planning. The relatively low scores in this dimension indicate that the program’s inputs are not yet strong enough to fully support its objectives. This suggests an Input- Context misalignment, thus, the program

is needed, but institutional readiness is insufficient. In the same line of argument, Educational Change and Implementation Theory by Fullan [23] opines that successful curriculum innovation requires alignment across Vision (recognized utility), capacity (resources and infrastructure) and Institutional commitment. In the current study, the vision is strong, but capacity and institutionalization are weak. The implementation gap explains why positive perceptions of value do not translate into strong engagement outcomes. Besides, experiential language acquisition, especially in English for Specific Purposes (ESP) or French for Specific Purposes (FSP) requires authentic exposure. Without immersion opportunities or institutional partnerships, learners are restricted to classroom-bound input, limiting learner potentials.

The *Teaching Strategies* dimension aligns with Process evaluation on the CIPP Model [19] with a focus on monitoring implementation and instructional practices. The composite mean score of 3.23 (SD = 1.15), indicates a moderately positive perception of instructional approaches used in Medical French. The moderate success of strategies aligns with principles of Communicative Language Teaching (CLT), which emphasizes interaction, role-play and simulation, learner-centered instruction and functional communication [24, 25]. The use of role-plays and group work reflects CLT implementation. However, the limited impact on confidence (as shown in learner inability to interact in French) suggests insufficient intensity or realism of communicative practice.

Learner Ability to interact with francophones corresponds to Product evaluation with a focus on assessing outcomes and program impact [19]. According to the CIPP model, product evaluation determines whether program objectives are being achieved. This construct recorded a composite mean of 2.98, indicating limited self-confidence in taking patient histories, explaining procedures, communicating in emergencies, building rapport among others. This suggests that students do not yet feel fully competent or confident in applying Medical French in clinical settings. Drawing on the Self-Efficacy Theory [26], confidence develops through mastery experiences, vicarious learning, verbal encouragement and reduced anxiety. In this context, limited immersion, scarce real-life practice, and insufficient authentic interaction may have prevented students from accumulating mastery experiences. As a result, self-efficacy remains moderate or weak despite reasonable instructional efforts.

Policy and Curriculum Implications

The findings of this study have significant policy and curriculum implications for regional integration and professional mobility within the Economic Community of West African States (ECOWAS). ECOWAS promotes the free movement of persons, labour mobility, and regional cooperation among member states; however, language differences remain a major challenge to effective professional integration, particularly in the healthcare sector (ECOWAS Commission, 2019). In West Africa, where Anglophone, Francophone, and Lusophone countries coexist with francophones in majority, healthcare professionals increasingly require multilingual communication skills to respond effectively to cross-border healthcare demands, migration, and regional public health emergencies. Ghana's geographical proximity to Francophone countries such as Côte d'Ivoire, Togo, and Burkina Faso further strengthens the strategic importance of French proficiency among Ghanaian health professionals.

The strong recognition by students of the relevance of Medical French suggests that language competence should be repositioned as a core professional skill rather than an optional supplementary subject. This finding supports previous studies emphasizing that multilingual communication competence improves patient safety, intercultural healthcare delivery, and professional adaptability in multilingual societies [27, 28]. In the ECOWAS context, inadequate language competence may limit the effectiveness of regional healthcare collaboration, particularly during cross-border disease outbreaks, humanitarian interventions, and health workforce mobility. Experiences from the Ebola epidemic and the COVID-19 pandemic demonstrate the necessity for coordinated regional responses supported by effective multilingual communication among healthcare professionals on the one hand and healthcare professionals and patients on the other [29].

From a curriculum perspective, the findings reveal a disconnect between the recognized usefulness of Medical French and the communicative competence developed by learners. Although students valued Medical French highly, limited institutional resources and insufficient opportunities for practical immersion reduced the effectiveness of the programme. This suggests the need for curriculum reforms that move beyond traditional grammar-based instruction toward communicative, task-based, and experiential learning approaches. Communicative Language Teaching (CLT) emphasizes authentic interaction and learner-centered communication as essential to language acquisition [30]. Therefore, Medical French curricula in Ghanaian health training institutions should integrate role plays, clinical simulations, problem-based learning, and hospital-based communication tasks to strengthen learners' practical communicative competence.

The study also underscores the importance of integrating intercultural competence into healthcare curricula. Effective communication in multilingual healthcare settings involves not only linguistic proficiency but also sensitivity to cultural differences in healthcare beliefs, patient interaction, and professional practice [31]. Embedding intercultural communication training within Medical French programmes could therefore improve the preparedness of healthcare graduates for cross-border professional engagement within ECOWAS.

At the policy level, stronger collaboration between universities, ministries of health, and regional educational bodies is required to support multilingual healthcare training. Institutional partnerships with Francophone universities and hospitals could facilitate student exchanges, clinical immersion programmes, internships, and collaborative research initiatives. Such partnerships would strengthen practical language exposure and align health professional education with ECOWAS objectives of regional integration and workforce mobility. Furthermore, policymakers should consider incorporating bilingual or multilingual competencies into national healthcare training standards and professional accreditation frameworks to enhance regional employability and competitiveness.

In effect, integrating Medical French more effectively into health professional education has implications beyond language learning alone. It contributes to healthcare accessibility, patient-centered care, regional cooperation, and the development of a mobile and adaptable healthcare workforce capable of functioning effectively within the multilingual ECOWAS environment.

Conclusion

Based on the above discussion, we conclude that there exist what may be termed as a Utility-capacity-Competence Gap as far as the effectiveness of the teaching/learning of French in health training institutions in

Ghana is concerned. Specifically, while students value the medical French program (Utility), institutions lack sufficient infrastructure (Capacity) for effective implementation leading to inability of students to interact with francophones (Competence). In other words, in the field of French for Specific Purposes (FSP) regarding medical French, strong perceived professional values may coexist with weak structural readiness, that pedagogical adequacy does not necessarily lead to communicative self-efficacy, and that resource constraints significantly mediate the effectiveness of specialized language curricula implementation in health education contexts.

Declarations

Author contributions: FKF conceptualized the study and wrote the manuscript. EM and FKF collected data while EN carried out the analysis. DPS review and editing the manuscript. All authors read and approved the final manuscript.

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