

## English for Medical Purposes in Algeria: Challenges and Solutions

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### Abstract:

As many domains, teaching English to medical doctors has become a necessity as a lingua franca in the age of globalization., in Algeria, however, where medicine is taught in French, this necessity has taken time to be a reality. Thus, learning experience in this context is challenging because of different difficulties doctors may face with English. A review of EFL and ESP literatures provides many approaches to address the issue. These approaches have given sound theoretical and empirical proofs of efficiency worldwide. Content based instruction, as this paper attempts to show, is an instance to adopt in such situation. This conclusion is drawn from both literature and a study in which thirty-five medical specialists in Touggourt, Algeria responded to a questionnaire used as a data collection tool.

**Keywords:** Medicine, Algeria, English Teaching, English for Medical Purposes, Content Based Instruction.

### ملخص:

لقد أصبح تدريس اللغة الإنجليزية للأطباء كباقي التخصصات ضرورة كونها لغة تواصل مشترك زمن العولمة. لكن في الجزائر حيث يدرس الطب اللغة الفرنسية فإن هاته الضرورة أخذت وقتا لتصبح واقعا. لهذا فإن خوض تجربة تعليمية في هذا السياق تعتبر تحد لنظر لمختلف الصعوبات التي يواجهها الأطباء مع الإنجليزية. وبتفحص لأدبيات الإنجليزية كلغة أجنبية و لغة لأهداف خاصة نجد مقارنات أعطت أدلة ملموسة لكفاءتها على المستويين النظري و التطبيقي عالميا يمكن أن تمثل حلا للمشكلة . تحاول هذه الورقة أن تبين أن التعليمية القائمة على المحتوى هي نموذج يمكن إعماله في هاته الحالة. خلاصة مستمدة من الأدبيات وكذا من دراسة شارك فيها خمس وثلاثون طبيبا مختصا في ولاية تفرقة بدولة الجزائر عن طريق الاستبيان كأداة لجمع البيانات.

كلمات دالة : الطب ، الجزائر ، تدريس الإنجليزية، الإنجليزية لأغراض طبية ، التعليمية القائمة على المحتوى

## 1. Introduction

In Algeria, English is taught as a foreign language at the middle and high school levels. Except for languages faculties, English is only an optional module in most fields at the university level. In medical faculties where French is the unique language of instruction, English has been introduced as an optional module only in the last few years. Because of time constraints mainly in the core curriculum, however, many medical faculties did not manage to find a way for students to benefit from the advantages that mastering English as a lingua franca could bring them in their professional and academic careers. This issue did not seem to be addressed by people specialized in the domain of EFL in general and ESP in particular. The question that this paper aims to answer is: What are the different challenges that may face learners of English for Medical Purposes in the Algerian context, and how could they be addressed? A quick literature review would convince decision makers that overcoming the difficulties raised and resolving these problems are not impossible tasks. Content based instruction could be taken as an instance of approaches to language teaching that have shown sound theoretical basis as well as empirical investigations which proved their efficiency in similar situations. In addition, the current study attempts to explore this issue with a sample of thirty-five medical specialists in the province of Tougourt at the south east region of Algeria.

## 2. Literature Review

### 2.1. English as a Foreign Language

Generally speaking, people who learn English as a foreign language (EFL) live in communities where they use another language on a daily basis. Learning English in this situation will depend to a large extent on the teachers' and learners' expectations of the language learning process and on the social context in which it takes

place. By social context, the entire learning environment could be included from the classroom size and the teachers' qualifications in terms of classroom managements to the climate situation and the logistic provided to face its challenges.

Teachers of EFL, thus, may sometimes face many difficulties undermining their abilities to reach their teaching objectives. The problem is due to the fact that the nature of learning English, as stated by Dean (2004), "is not a straightforward business; smooth, staged and linear, but 'messy', context-based and requires frequent recursive experiences" (p. 2). Thus, novice teachers may be deceived by drawbacks resulting from the effect of many factors on the learning process such as students' backgrounds and motivations, learning environment, and others.

Learners' differences in terms of expectations, needs, attitudes, and learning styles as well as teachers' differences in terms of attitudes and teaching styles are also important issues related to learning EFL. In contrast, Tomlinson (2005) advises EFL teachers, wherever they are, "to teach in ways that suit their beliefs and personalities while being sensitive to the needs and wants of their learners and to the prevailing norms of the cultures in which they are teaching" (p. 150). In certain Arab countries, for instance, teaching friendship should take into consideration the cultural definition of this concept regarding gender.

Language teaching professionals were involved during the last century, according to Brown, in a "search for a single ideal method generalizable across widely varying audience that would successfully teach students of foreign language in the classroom (2002, p. 9). Surprisingly, this search ended up with a number of, sometimes, competing theoretical methods of teaching. Being aware of this historical aspect of their profession is an important factor that determines teachers' performances and daily practices. This awareness will place different options and alternatives at their disposal in their way of going about teaching.

Among others, Psycholinguistics, and Sociolinguistics have contributed in exploring and developing the domain of teaching EFL. This interdisciplinary aspect has made the teaching field appealing for many researchers to add more to the existing knowledge that would increase teachers' chances to reach successfully their objectives. Language teachers are, therefore, called to make more effort to cope and better to contribute in this research effort. They need to expand their scope of interest to those disciplines in order to make their decisions and practices in line with the expanding field of language teaching.

In their review of the literature, Richards and Rodgers (2014) proposed a framework to introduce different approaches to teaching based on two important theories: The first one is related to 'the nature of language proficiency' and how language is viewed mainly the structural, the functional, and the 'interactional' schools. The second theory that shaped many approaches to teaching language is related to the processes involved in language learning and the conditions needed for these processes to be activated. The authors included many factors like behaviorism, cognitive code learning, skill learning, interactional theory, socio-cultural learning theory as well as the role of individual factors in language learning.

## **2.2. English for Medical purposes**

This type is a part of the field of English for Specific Purposes developed in the period after World War Two which has known an immigration movement towards the USA mainly for many reasons. English for Specific Purposes (ESP), then, emerged because of a great demand to learn English at larger scale. Johns (2013), as cited in Paltridge, & S. Starfield, reported that "the central focus of ESP research at that time was English for science and technology (EST) in academic contexts" (p. 7). This subfield of English Language Teaching (ELT) developed ever since to become a field of its own. The name suggests that English is not taught for its own sake, but

rather for other purposes mainly related to the learners' field of interest like English for Medical Purposes (EMP).

St John and Dudley-Evans (1998) provided a broad definition of ESP in which the courses are designed to meet specific needs of particular learners. These courses are centered on the language or genre appropriate to the targeted discipline or field of interest making use of its methodology and activities. In practice, these principles are realised by great efforts made by the teachers or course designers for adapting general English to the context and the discipline in which the teaching takes place.

ESP investigations have led to the emergence of many subfields mentioned by Master(2005) according to their focus, like English for Academic Purposes(EAP), English for Science and Technology(EST), English for Occupational/Professional Purposes, English for Business and Economics(EBE), English for Medical Purposes (EMP), and English for Academic Legal Purposes.

Needs analysis is the first stage, as Flowerdew (2013) put it, in an ESP course development, which means that an ESP course is based on predefined goals mainly related to the learners needs in the target language. Critics to ESP studies, However, came from some of its famous proponents St John and Dudley-Evans (1998) who found that, "few empirical studies have been conducted to test the effectiveness of ESP courses" (p. 303). In other words, they are calling for publication of more experimental studies based on critical orientations.

ESP was then a natural consequence of English holding the status of international language and lingua Franca. In addition to German and French, as reported by Ferguson (2013), English had been another international language of medical sciences that replaced Latin and Arabic. By time, however, English has taken advantages and dominance mainly in the proportion of journal articles published and international conferences held in English.

As a category of ESP, English for Medical Purposes (EMP) is a

fertile field of inquiry that would cover many related topics. These include, as Ferguson (ibid) enumerated among others, the genres, grammatical features, and aspects of medical vocabulary, as well as the spoken genres in doctor–patient consultations, conferences, and medical congress presentations. Research in these aspects plays an important role in the course design process as they provide the teacher with the main features that differentiate medicine from other scientific domains.

### **2.3. Content Based Instruction**

Content Based Instruction (CBI), as defined by Richards and Rodgers(2014), “refers to an approach to language teaching in which a teaching is organized around the content or subject matter that students will acquire such as history or social studies rather than around a linguistic or types of syllabus” (p. 116). Medicine in Algeria, for instance, is taught in French. Because the first language in Algeria is Arabic, students will learn French in the same time but not in the same way language students do. In the latter case the syllabus is organized around subjects like grammar, discourse, and so on, whereas in the former students learn topics like anatomy, physiology or pharmacology through French. Then they will learn the language in use rather than a subject per se.

Content Language Integrated Learning (CLIL) that has been officially adopted by the EU community since 1994 has the same definition and principles of CBI, according to Richards and Rodgers (2014), but differs in focus. In CLIL like in CBI a teacher of Anatomy for instance would teach the course in a second or foreign language but may teach a linguistic topic in the same time which is not common in CBI where a content teacher working alone or in collaboration with a language teacher to teach a content topic. In this case, the language teacher serves to select from the content material what would better serve the objectives of the course and what would fit the learners’ level in the second or foreign language.

As explained by Gibbons ((2015), many reasons that could justify the integrating content and language in the same course. In addition to the gain in time that could be spent by some institutions for teaching language prior to a content like medicine in a foreign language and that cannot guarantee a full understanding of the subject, integrating language with content is seen as exposing the learner to a meaningful use of the foreign language in an authentic context of the content with its specific genres and discourse in the aim of enhancing both language and content learning by reciprocal effect. Lastly, integrating language with content would enhance learners' second and foreign language cultural awareness which eventually would have positive effect on later contact or even integration of the learners in foreign language social contexts.

Designing a CBI or CLIL course, according to the framework set by Richards and Rodgers ( 2014) needs an awareness about the nature of language and the theory of learning upon which the two approaches are built. It focuses on the content-specific vocabulary and considers grammar according to its use in the subject not in terms of its difficulty. Language in this view is a specific discourse to learn which implies that the linguistic entities used should be above the sentence. The framework recognizes the necessity of comprehensible input, the importance of meaning negotiation, and the role of feedback in facilitating learning the content language. Learners' prior knowledge makes a starting point from which the teacher assists them to take more responsibility on their own learning over time.

### **3. Methodology**

In order to investigate the issue of English for medical purposes in the Algerian context, 35 medical specialists in the province of Tougourt at the south east region of Algeria have participated in this study. A questionnaire made of ten closed ended questions administered to the participants was the tool used to collect data. It

aimed at finding more information about the participants' attitudes, experiences, and difficulties with English. It also tries to infer participants' needs, lacks, and wants related to learning English in their contexts.

### 3. 2. Results

The results are here presented according to the links between questions.

**Q 1.** You are specialist in: .....,with an experience of .....years, and you work:

- In a public hospital
- In your private clinic

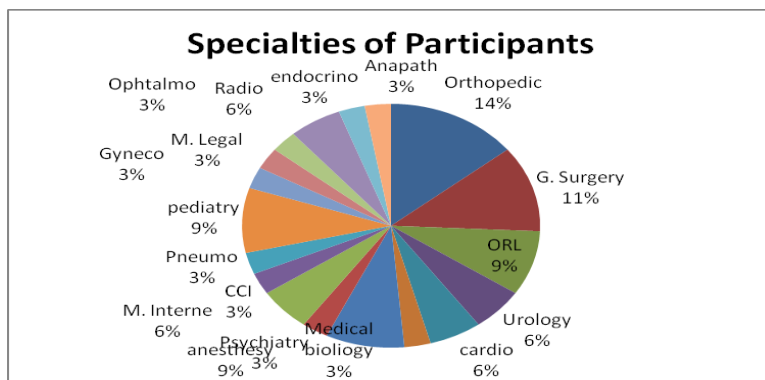
The participants represent 18 specialties with different experiences in the field ranging from one to 30 years.

**Table 1. Different Specialties of the Participants**

| <b>Specialties</b>          | <b>Number</b> |
|-----------------------------|---------------|
| <b>Orthopedic Surgery</b>   | <b>5</b>      |
| <b>General Surgery</b>      | <b>4</b>      |
| <b>Anesthesiology</b>       | <b>3</b>      |
| <b>Urology</b>              | <b>2</b>      |
| <b>Pediatrics</b>           | <b>2</b>      |
| <b>Otolaryngology</b>       | <b>3</b>      |
| <b>Ophthalmology</b>        | <b>1</b>      |
| <b>Cardiology</b>           | <b>2</b>      |
| <b>Diagnostic Radiology</b> | <b>2</b>      |
| <b>Internal Medicine</b>    | <b>2</b>      |
| <b>Medical Biology</b>      | <b>1</b>      |
| <b>Psychiatry</b>           | <b>1</b>      |
| <b>Gynecology</b>           | <b>1</b>      |
| <b>Pathology</b>            | <b>1</b>      |
| <b>Endocrinology</b>        | <b>1</b>      |
| <b>Pediatric Surgery</b>    | <b>1</b>      |
| <b>Legal Medicine</b>       | <b>1</b>      |
| <b>Total</b>                | <b>35</b>     |

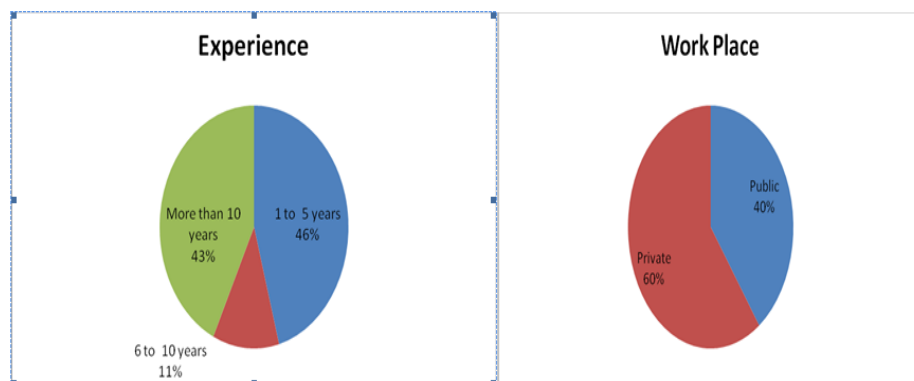
Source: Prepared by the Researcher from output.



**Fig 1. Specialties of the Participants**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

89 % of the respondents have more than 5 years when they left the medical academic curriculum to work in public hospitals or in their own clinics;

**Fig 2. Experience and Work Place of the Participants**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

**Q 2.** The last time you have studied or learned English was( votre dernier cours en Anglais):

- ☐ Less than one year
- ☐ 1 to 3 year ago

○ More 3 years ago

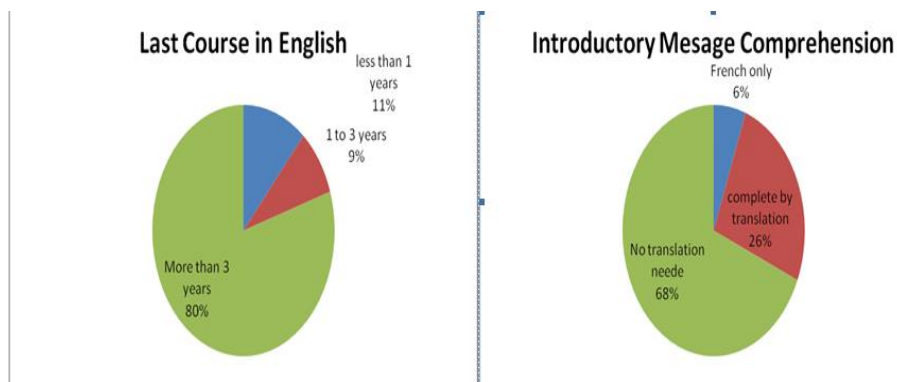
The introductory question about the beginning of the questionnaire where the researcher introduces himself was stated as follows:

- Before you read the French translation please answer this question:

How did you find this message? ( see appendices)

- I have understood 90%, no need to read the French translation
- I have understood 50%, and I need to complete by reading the translation.
- I have understood less than 20%, and I rely only on the French translation.

The participants as specialists in medecine have been immersed in a French linguistic environment whether during or after finshing their medical studies. Only 20 % of them reported having courses in English in the last 3 years. Nevertheless, 68% of them stated that they easily understood the introductory message written in English. only 26% needed to complete with the translation wheras 6% relied only on the French translation.

**Fig 3. English Comprehension and last Course of the Language**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

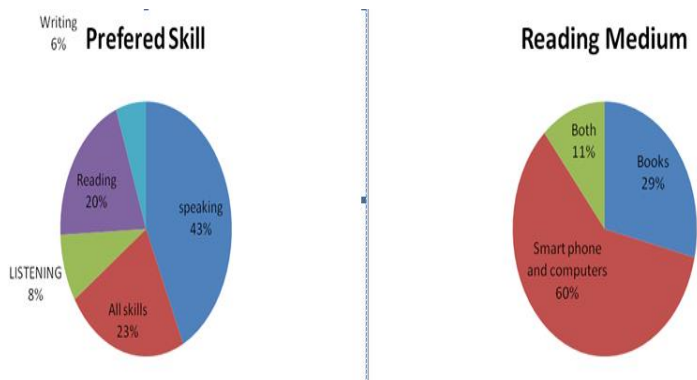
**Q 3.** Which one among the 4 language skills do you prefer doing?

- ☐ Speaking
- ☐ Listening
- ☐ Reading
- ☐ Writing

**Q 6.** Do you prefer reading from

- ☐ Books
- ☐ smart phone, computers and Internet pages

The participants have different tendencies in terms of the language skill they prefer to improve, but in sum 66% wanted to improve their speaking abilities. With the advants and availabilty of new technologies, it was not surprising to find that most participants prefer using smart phones more than books in learning.

**Fig 4. Preferred Skills and Mediums of Learning**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

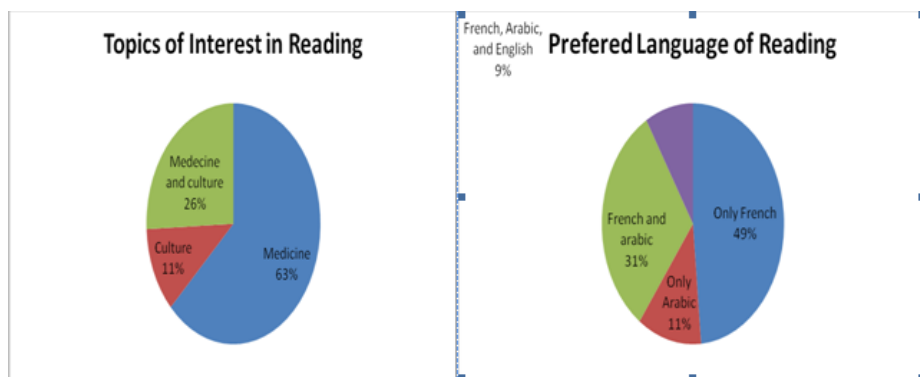
**Q 4.** What kind of subjects you are interested in reading too often?

- ☐ Novels (Romans)
- ☐ Medicine
- ☐ Culture
- ☐ Others: .....

**Q 5.** Your readings are:

- ☐ .....% in French
- ☐ ..... % in Arabic
- ☐ .....% in English
- ☐ .....% in other languages

Asked about their readings, 63 % stated that they only read medical topics while 26% read medical and cultural ones. In total 89% of the participants have, naturally, medicine as the preferred topic of their usual reading activities. As for the language 49% read only in French and 31 % read both arabic and French.

**Fig 5. Topics and Languages of Preference in Reading.**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

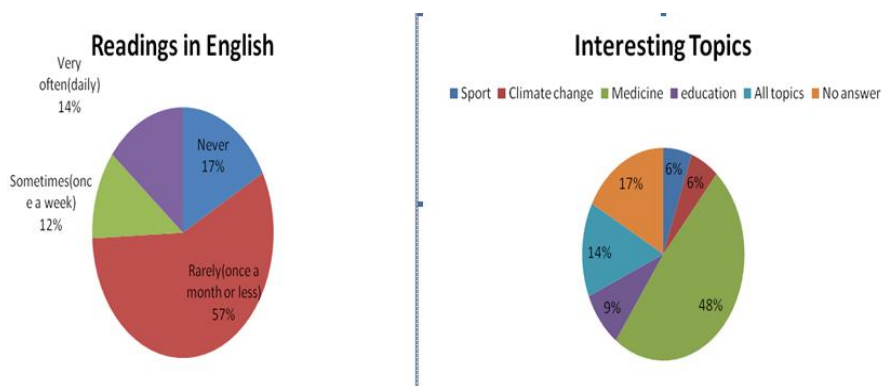
**Q 7. How often do you read medical texts in English**

- Never
- Rarely: once a month or less (une fois/ mois ou moins)
- Sometimes: once a week (une fois / semaine)
- Very often: every day (chaque jour)

More the 70 % of our respondants rarely or never read in English only 14% reporetd having daily reading activities in English.

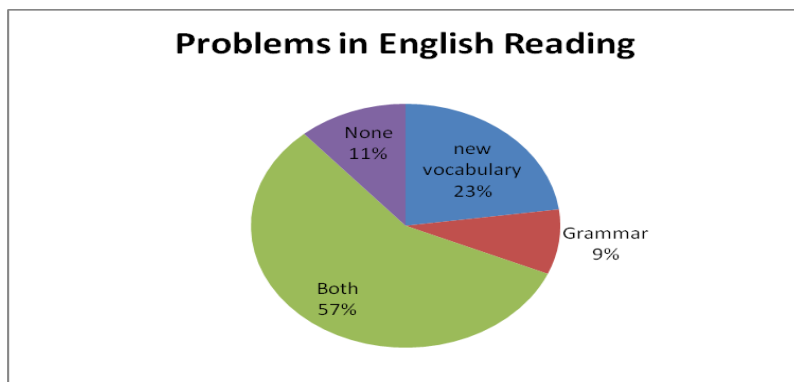
**Q 10. Choose only one paragraph and give it a title (choisissez un seul paragraphe et donnez-lui un titre)**

In another question, the participants have been given four different topics to read and asked to chose one to give a title. More than 60 % answered the medical topic confirming the preferences expressed in the previous questions about topics of interests.

**Fig 6. Frequency of English Reading and Preferred Topics of Interests**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

**Q 8.** As for the challenges faced by our participants around 90% reported having problems with Grammar and new vocabulary.

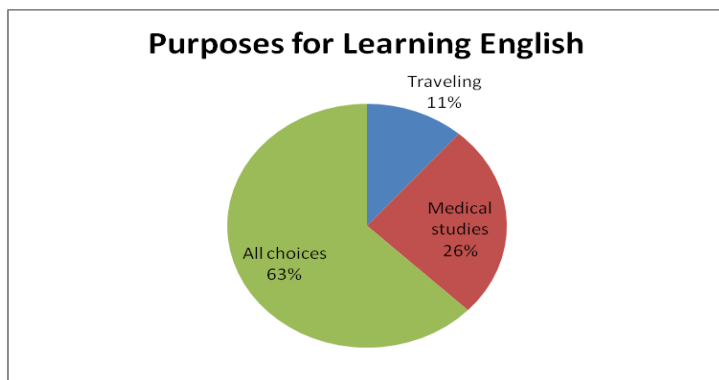
**Fig 7. Problems Faced in Reading**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

**Q 9.** What do you think you may need English for? L'anglais vous sera nécessaire pour

- For traveling (voyage)
- For studying (études)
- For working (travail)
- For pleasure (plaisir)

Lastly, the participants' purposes for learning English differ from traveling to studies and working as shown in figure 8

**Fig 8. Participants' Purposes for Learning English**

Source: Prepared by the Researcher from output ( Microsoft Office Excel).

### 3. 3. Discussion

The participants' answers to the questionnaire show that the long immersion of doctors in the French linguistic environment of studies and work as well as the non-exposure to English have had an effect on their linguistic preferences mainly to French and on their English proficiencies. They also expressed clear tendencies for medical topics in their daily reading activities whether in French or in English. The problems faced when reading in English were structural ones: mainly Grammar and new vocabulary. The participants expressed an obvious need to improve their levels in English especially in speaking which would enhance their abilities to communicate during their travels for academic participations.

### 4. Pedagogical Implications

From both literature review and the study results, some suggestions could be given for teaching English for medical professionals:

- The content based instruction proved to be the most appropriate for this context given the fact that it provides the preferred topic of interest for those learners.

- A theme based model focusing on linguistic syllabus would better help learners to fill in their lacks of grammar.
- Despite their wants to improve speaking skill, an integrated skill course would enhance progressively all skills because of the long lack of English exposure.
- Because of the constraints due to doctors' limited time, a weekly session of two heures and half seems acceptable and less boring .
- The course could be completed using work assignments and activities benefiting from new technologies and social media opportunities.
- Teaching EMP could be more effective if it started early in the medical curriculum where students' background would be stronger and if the decision makers manage to create more opportunities for medical students to practice English.
- Since English is taught as a foreign language in the Algerian middle and high schools, further research with other specialties like engineering would eventually confirm the effectiveness of CBI approach in teaching English at the university level.
- It is important to set the specialised body that would take in charge a serious and well-informed course design.

## 5. Conclusion

English for medical purposes is a need expressed by medical professionals in Algeria. Being totally immersed in French environment, English is necessary to enhance their abilities to globally communicate in academic situations. Doctors, however, are still facing difficulties with English despite having learned it for more than six years in middle and high schools. The study results and a quick review of the literature show that content based instruction could be the appropriate approach to adopt in this context to face those



challenges. This approach is more demanding for teachers, but is more engaging and motivating for the learners as it fits in with the needs and interests of medical professionals in Algeria.

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