

## Student perceptions on how content based instruction supports learner development in a foreign language context\*

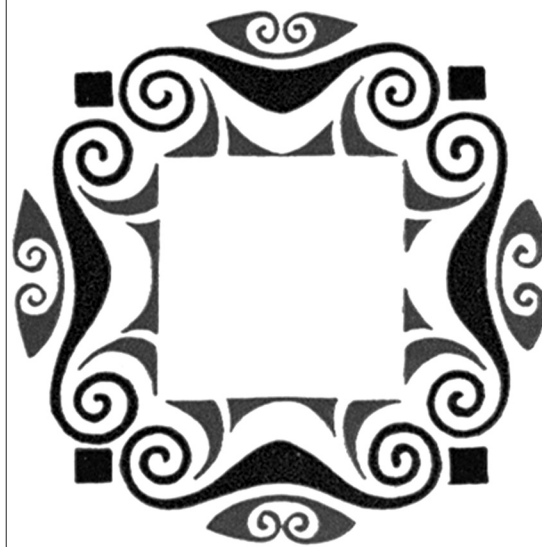
*Las percepciones de los  
estudiantes sobre cómo la  
enseñanza basada en contenido  
apoya el desarrollo del aprendiz  
en un contexto de lengua  
extranjera*

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\*This work builds on previous study that was performed to determine the effects of a semester of CBI on the learners' ability to achieve a communicative purpose in a foreign language (Corrales & Maloof, 2009). Through the use of classroom observations, semi-structured interviews, and learning journals, the researchers found that CBI was effective in developing students' productive and receptive language skills, lexis development, organization when speaking (i.e., using aspects related to discourse such as textual units—introduction, explicit links, and transitions), and content knowledge. The previous study also published preliminary results as to the reasons behind this effectiveness which this present study amplifies.

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<p>Amplios estudios sobre la Enseñanza Basada en Contenidos (EBC) evidencian la efectividad de este modelo en el desarrollo de la lengua y conocimiento de contenido; sin embargo, hay poca explicación sobre el por qué de esta efectividad. Ampliando un estudio anterior, este artículo presenta los resultados de un estudio cualitativo con el objetivo de ver cómo este modelo apoya el avance lingüístico. Los datos de las entrevistas y diarios de los participantes revelaron que el uso del material auténtico que era significativo, interesante y relevante a las necesidades actuales y futuras de los estudiantes, la activación del conocimiento previo y la metodología específica utilizada en clase demostró ser de gran utilidad al ayudar a los estudiantes a desarrollar el idioma.</p> <p>PALABRAS CLAVES: Instrucción Basada en Contenidos (CBI), ESL/ESL, metodología de la enseñanza de una lengua, aprendizaje de lenguas.</p>	<p>RESUMEN</p>	<p>ABSTRACT</p> <p>Ample studies on content-based instruction (CBI) provide strong evidence as to the effectiveness of this methodology in developing language and content knowledge in students; however, there is much less information as to why this methodology is so effective. Building on the results of a previous study, this paper discusses the findings of a qualitative study to see how CBI supports language development. The data collected through student interviews and learning journals revealed that the exposure to authentic material that was meaningful, interesting, and relevant to students' present and future needs, activation of prior knowledge, and the specific methodology used in class were the most important factors which supported language and content development.</p> <p>KEY WORDS: Content-based instruction (CBI), EFL/ESL, language-teaching methodology, language learning.</p>
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In order to prepare students to be successful in the modern multilingual world, language education has evolved. New methods and approaches appear constantly to help students better meet their language needs. This can be seen with the emergence of communicative language teaching, English for specific purposes (ESP), and other avant-garde approaches which strive to offer students the opportunity to develop language skills not only for general purposes, but also for their academic and professional needs.

The creation of the innovative language teaching methodology, content-based instruction (CBI), defined by Brinton, Snow, and Wesche (1989), as “the concurrent study of language and subject matter, with the form and sequence of language presentation dictated by content material” (p. vii), has allowed the integration of content and language. Therefore, enabling learners to have a more authentic and meaningful language learning experience. As Eskey (1997) explains, “the content-based syllabus is best viewed as a still newer attempt to extend and develop our conception of what a syllabus for a second-language course should comprise, including a concern for language form and language function, as well as a crucial third dimension – the factual and conceptual content of such courses” (p. 14).

Hence, CBI fosters a vision of learning that is very different from traditional language-learning models that focus on the teaching of language forms. Through this method, students are able to develop the skills that enable them to gain access to the increasing amount of specialized first-hand information that is published in English while providing them with many opportunities for language production (Stoller, 2004). It is this dual commitment to language and content development that has caused this method to become

widely used in native English-speaking countries and a recent increase in the implementation of CBI in the English as a foreign language context and at the university level.

Ample studies on content-based instruction—often called Content and Language Integrated Learning (CLIL) in Europe – provide strong evidence as to the effectiveness of this methodology in developing language, in productive and receptive skills and self-confidence in the students in the short-term (see Stryker & Leaver, 1997; Wesche, 1993; Stoller, 2002; Klee & Tedick, 1997, Corrales & Maloof, 2009; among others) and academic success in the long-term (Song, 2006). Other studies have shown students to have comparable or better mastery of content knowledge when compared to students who are not taught with this approach (Andrade & Makaafi, 2001; Kasper, 1994; Winter, 2004).

When looking at the reasons behind this effectiveness, according to the literature on the subject, one aspect seems to relate to the design of the curriculum. In CBI, subject matter becomes the organizing principle of the curriculum which allows students to simultaneously learn content and language because the “artificial” separation between language and content is eliminated (Stryker & Leaver, 1997). Language is seen as a medium for learning content and content is a resource for mastery of language (Stoller, 2002); thus, CBI programs present grammar, writing skills, and vocabulary in the context of learning about “something else” rather than learning about language itself. While traditional linguistic skills are not ignored, they are not the focus of the course because CBI proponents claim that “language is learned best as a vehicle of instruction, not as the object of instruction” (Snow & Kamhi-Stein, 2002, p. 37).

Also, similar to ESP courses, the topics and materials implemented in courses that use this method seem to meet the needs of the students in a more effective way. Basing the language instruction about content offers unlimited possibilities for teachers to match the students' linguistic, cognitive, and affective needs with interesting, relevant, and meaningful input from a variety of sources because CBI material can be taken from any authentic text in any content area (Richards & Rodgers, 2001). These topics, if chosen wisely, are combined with the use of authentic language and simulated real-life tasks which means they are relevant to the students and the class activities represent something they will need in the future (Brinton, 2000). Thus, the increase in motivation and enjoyment that CBI offers has given students a more positive attitude toward learning the second language in general (Wesche, 1993).

One of the most significant aspects related to why this approach has been so successful can be found in the affective area of the students involved in CBI programs. Learner motivation in most of the literature on CBI programs has been shown to increase. As Stryker and Leaver (1997, pg. 307) assert: "if the program meets students' linguistic, cognitive, and affective needs, motivation is enhanced (noting, however, if the content is too far over their heads, their motivation will suffer)." Students express higher motivation when "real issues" become the center of study instead of the "contextual vacuum and boredom" they have experienced in the past (Stryker, 1997; Klahn, 1997). Further, courses are seen as more enjoyable and satisfying (Wesche, 1993). Duri (as cited in Stryker & Leaver, 1997) found that students mentioned that the CBI course is "fun" and helps them to "learn with less pain," and the CBI-based curriculum makes the second language something that they "couldn't help but to learn" (p. 307). Thus, the increase in motivation and

enjoyment that CBI offers has given students a more positive attitude toward learning the second language in general and enrollment in many CBI programs has increased (Wesche, 1993).

Thus, the literature on content-based instruction has documented various reasons why this methodology has been successful; however, there is a need for more evidence. Also, most of these studies have been performed in contexts where students are learning a second language. Therefore, this present study has as its purpose to confirm the previous research performed on this subject and extend it to the English as a foreign language context by examining this issue at a university in Colombia, South America.

## METHODOLOGY

In order to examine the reasons behind the language development of students who attended classes using content-based instruction, a qualitative, ethnographic design was adopted. The sources of data for this ethnographic study included a background survey, interviews, and student learning journals. Data collection occurred over a four-month period of time in which learners from one section of a level four medical English course which used content-based instruction were asked to participate. This group was chosen because in the Medical English Program at this university, the fourth semester is the first time students receive content-based instruction.

## CONTEXT OF THE MEDICAL ENGLISH PROGRAM

The Medical English program uses two types of language teaching methodologies depending on the level. The initial stage, levels one, two, and three of the program focuses on general

English topics to foster communication in the four language skills—reading, writing, speaking, and listening—and aims at preparing students for more complex and demanding content-based material of the second stage. The second stage includes levels four and five. These last two levels are founded on the principles of theme-based CBI in which students continue to develop their general language skills as they develop their academic language skills, such as reading medical textbooks and journals, listening to and understanding presentations and lectures, discussing medical issues, giving presentations, writing different types of texts associated with the medical field, etc. This two-tiered model is used to allow the language learner sufficient time to develop basic communicative skills which should enable him or her to be functionally competent in general contexts and develop learning strategies before moving on to a more demanding, academic stage.

Level four, which the participants of this study were taking, is organized around anatomy and physiology topics such as the systems of the human body. In this level, students use the concepts related to the human body systems in order to identify and produce language typically used by professionals in the medical field (i.e., description of physical structures and processes). The classroom activities stem from the authentic material which serves as the backbone of the course—chapters from textbooks written for students at American universities, journal articles, newspaper texts, podcasts, documentaries, and among others. This material is implemented using a variety of best-practice pedagogical techniques (i.e., variety of activities, groupings, and interactions; integration of language; etc.) and focuses on language at the discourse level rather than at the sentence level. All of this ensures that students have the best possible exposure to materials and language in which language structure is

not the main focus but rather the communication of ideas, which is truly at the heart of content-based instruction.

The evaluation process uses a balance of paper-and-pencil tests and alternative assessments to gain insight into the language and content development of the students. Besides traditional exams, students are also given many oral quizzes (e.g., debates, plenaries, panels, oral presentations, and one-on-one questions) and are assessed through a portfolio in which students collect reading, writing, and vocabulary development activities throughout the semester.

#### **PARTICIPANTS**

The class under study was composed of 16 university students between the ages of 17 and 22 from various semesters in their academic medical program. This means that some students had already studied some of the content that would be covered in this course in Spanish and others had not. Initially, a background survey was applied to obtain data on the learners' English-language experience. From this information, we selected the four members of the class for our focus group, two males (AK and KR) and two females (MJ and ML). The researchers choose one "highly proficient" student, one "middle-level" student, and two "low" students. Only these students participated in semi-structured interviews carried out at the end of the semester.

#### **DATA COLLECTION**

Once a month during the semester, the participants were asked to complete a learning journal during the last 15-minutes of their class session. Instead of having students write in an open-

forum diary, we decided to apply five learning journals throughout the semester with four or five questions on each. Students were asked to write their responses in Spanish in order to have the most detailed information possible, but some decided to answer in English. Because it was the first time the students ever used this type of data collection tool, we decided to use the first journal as a pilot. Thus, the information reported in this study is taken from journals two through five. Because of attendance issues, we had the following number of participants for each journal: Journal two—13 participants, Journal three—16 participants, Journal four—14 participants and Journal five—15 participants.

After giving each learning journal, we read, categorized, and analyzed them. These preliminary results helped us to design the next learning journal. For example, if on the first learning journal we felt students did not respond to a question completely, we then asked the question in another way on the next journal. Thus, some of the questions throughout the five learning journals are similar (see Appendix 1 for the learning journal questions).

Two weeks before the end of the course, the researchers performed the semi-structured interviews individually to each of the four focus group members, again, in Spanish. Using the data analysis from students' learning journals, we made a series of questions for each member of our focus group, moving from general questions to clarifying specific information that each participant had written in his/her learning journals. During the natural course of the interview, some of the questions were omitted, asked in a different order, or changed entirely. In order to analyze the data, transcripts were made of the four interviews and categories were devised (see Appendix 2 for the questions asked to each focus group member).

This data from the interviews was triangulated with the information obtained from the learning journals in order to answer the research questions proposed in this study.

## RESULTS AND DISCUSSION

In this study, the data showed that CBI supported language development in the following ways:

1. Students learned language and content through CBI because the information was meaningful, interesting, and met their present and future needs.
2. Prior knowledge about some of the topics allowed students to learn language.
3. Exposure to authentic materials supported learning.
4. Methodological activities founded on content supported learning.

Each of these results will be reviewed separately. Because students used a variety of Spanish and English on the instruments, we have translated the Spanish excerpts into English. Those that were written in English are the exact words that they used, including their grammatical errors.

1. STUDENTS LEARNED LANGUAGE AND CONTENT THROUGH CBI BECAUSE THE INFORMATION WAS MEANINGFUL, INTERESTING, AND MET THEIR PRESENT AND FUTURE NEEDS.

Similar to other studies on CBI, the results obtained from the analysis of the data revealed that the use of CBI seemed to be effective because of the positive impact it had on affective areas

such as motivation, interest, lowering of anxiety levels, and meeting participants' specific present and future needs.

When looking at the data, we discovered that there was an interesting dynamic between meaningful learning, motivation, and interest. Students became motivated because the material presented in class was interesting and meaningful for them since it was related to their area of study. We believe that this dynamic was significant to the development of language as can be seen in the excerpts below.

I am very motivated, as I told you, I mean, a person studies a book that is teaching you medicine also, which is what you are doing and that motivates you. *You want to read the book and you want to learn new things* (Interview AK, *emphasis added*)

Now it is more interesting because I am seeing medical things in English and that helps me with my major and it helps me with what I am studying... now, really, I learn new things in each class... topics that will really help with what you are doing today. (Interview AK)

It has helped me to study English because I feel more motivated and interested in learning English because it doesn't leave the area of my major. (Journal 2)

One of the most important features of CBI is the use of content material. This present study suggests that one of the reasons for using content-related material is to motivate the students to learn, as can be seen in the underlined section of the Interview AK above. The excerpts imply that the learning process was effective with regards to language and content development because they were interested and motivated by the material. Also, for students who had difficulty learning English in the past, the topics related to their area of interest helped them feel more positive about

the language, in general, as can be seen in the following quotation.

It really has been helpful for me since now I am learning medical English, and it has helped me to like the language a little more. (Journal 3)

The students also related that the material was meaningful for them because it met their present and future needs. Students commented that learning medical topics and vocabulary in English has helped them in their other classes where they have to read articles and books in English.

...English is fundamental. I have realized this because I have to read many books in English, the best internal medicine books, and all of them are in English. (Interview ML)

Yes, because in other classes is usually that the professor send a medical article in english and you must read it. So my english is getting better and it helps me with other classes. (Journal 3)

Furthermore, the participants felt that this CBI course would help them in their future. Some students stated that the information that they have learned would help them in their medical classes because they will be learning about some of the topics seen in English class in other semesters. This can be seen below:

Yes because there are topics that I saw at the first semester and now in the first of this semester and I had discovered new things that I don't know, and too, there are topic such as nervous system which I will see the next semesters. (Journal 3)

Other students found this information to be necessary for them as professionals who want to keep up-to-date in their field or even to undertake specialist studies in an English-speaking country, as participants stated below:

We know that learning English is very important for any professional and even more for us because we, as future doctors, will have to research and keep ourselves informed about research that is generally in English. (Journal 3)

And also, it is focusing me on where I want to go. I want to go somewhere else to specialize myself, to better my English; I don't know in what part of the United States, but I want to do my internship there, so this is very good for me. (Interview ML)

Additionally, the implementation of a content-based approach seemed to lessened anxiety and raised students' self-confidence as can be seen in the examples below.

I have more self confident, I speak in English without afraid; if I have a mistake I correct that and I have more vocabulary for speak. (Journal 3)

We inferred from these comments that students' anxiety was reduced because they were able to speak in English about something that they already knew in Spanish and were interested in.

It has made me more self-confident because I'm talk about thing that interest me and that I'm know better; so I can talk with more property. (Journal 3)

Through this class we are able to talk about things that we already know and have studied and that helps it to be easier to use the terms in English. (Journal 3)

Also, because CBI emphasizes content material more than grammatical structures, when students were asked to speak they were able to focus on communicating meaning rather than using certain grammatical patterns. We feel that this aspect appeared to lower their anxiety and help to increase their confidence.

Using more content than grammar allows us to speak and understand more than when we need to follow the grammatical rules. (Journal 3)

Another aspect that we felt was important for the lessening of anxiety was the sense of camaraderie that the students felt with their classmates. In both the learning journals and interviews students mentioned that this positive attitude was instrumental in not only them feeling more comfortable in the class, but also this comfort level helped their development of language.

...I think that it was a nice course where you had confidence and where you could express yourself easily, that everyone, maybe everyone didn't have the same language level in the course, but the people didn't care that you were corrected or that you were slower or something. I think that I have gotten better and I feel more confident than last time...the confidence that your classmates give you that helps you to start to get better. (Interview KR)

With the help of the teacher and my classmate that are very patient with my English. And the oral presentation helped me a lot of to improve my speak in front of the people. (Journal 3)

We realize that a positive classroom environment is instrumental in learning no matter what methodology is applied. However, we see the use of CBI's methodology, which is grounded on the use of content material, as instrumental to the development of this positive environment. As we mentioned before, the students found the topics and material interesting, meaningful, and closely related to what they were doing in their major. This seems to have made them feel identified with the course and with each other which raised the level of camaraderie in the group. Therefore, we felt that it was necessary to mention this as one of the reasons behind the effectiveness of this methodology.



## 2. PRIOR KNOWLEDGE ABOUT SOME OF THE TOPICS ALLOWED STUDENTS TO LEARN LANGUAGE.

As mentioned in the section above, we found that having prior knowledge of some of the topics in Spanish facilitated the comprehension and learning of them in English. It seems that having the cognitive structure in Spanish provided some scaffolding for the students and allowed them to deal with language constraints while at the same time enabling them to link the new information to the old. According to constructivist theory, prior knowledge is vital in order to learn anything because it provides "anchors" to which the new knowledge is connected. The more connections that are made, the more learning will take place (see Anderson, 1990). Thus, it is reasonable to suggest that content that students already knew allowed more connections to be made with new content knowledge and new language aspects. This idea is supported by comments made by students.

For to associate the Spanish concepts with English concepts and I learned more vocabulary. (Journal 2)

...learning English, learning other medical topics, and it has helped me, it has helped me more...you can compare them, what you are seeing in Spanish and you review and remember... (Interview AK)

It has helped me because I have learned a lot of vocabulary that has to do with medical science and *knowing it in Spanish makes it easier for me to express it in English.* (Journal 3, *emphasis added*)

It has made me more self-confident because I'm talk about thing that interest me and that I'm know better; so I can talk with more property. (Journal 3)

Through these excerpts we see that students theorized about how they learned English with CBI. Some felt that having some prior information in Spanish enabled them to learn vocabulary and

express their ideas more easily. Also, students mentioned that dealing with topics that they knew and they found interesting made them feel more comfortable when expressing their opinion in English. In the interview with AK, we can see that he believed that he learned by comparing the old information with the new.

## 3. EXPOSURE TO AUTHENTIC MATERIALS SUPPORTED LEARNING.

The data also revealed that the authentic materials used in class were instrumental in the students' development.

Now in forth semester...we begin with this anatomy and physiology book. I think that for us it is good...with the book, what we talked about with cells, the extra material that was given to us..., not only from here but from other material, that was a real anatomy and physiology book, and we were able to understand it, and it was maybe easy... (Interview KR)

Because the readings and materials used helped us to learn new terms, words that we didn't know before and helped me to talk a little more when I tried to speak English. (Journal 4)

The readings helped me to improve my vocabulary; everyday I learn with the texts that read in my English class. (Journal 4)

Students realized that the material used in class, such as chapters from anatomy and physiology textbooks and other authentic materials, provided them with language models that served for their own output. This input enabled them to develop lexis and improve comprehension and speaking skills. In light of studies on second language acquisition, it makes sense that the learning of complex vocabulary and structures that students reported above is best taught through the use of complex materials (i.e., authentic content). It is through this negotiation of meaning of both language structure

and content, which is necessary for language development (see Lightbrown & Spada, 1993), was a reason behind student learning.

#### 4. METHODOLOGICAL ACTIVITIES FOUNDED ON CONTENT SUPPORTED LEARNING.

We did not set out to study teacher procedures implemented in class. Nevertheless, through students' comments in their learning journals, we found it necessary to look at both methodological considerations of CBI in general and the procedures implemented in class of the specific professor.

As we have mentioned earlier, close to the heart of CBI is the principle of basing all language material and tasks on content. Thus, unlike general English courses, CBI is not based on grammar, but language structures are acquired by the students. The participant in the excerpt below recognized that although the focus was not on grammar, she or he improved in grammar and was able to use it correctly as can be seen in this quotation.

It is important the use of contents because you can use grammar without realizing you are doing it. (Journal 3)

Participants also noted that one of the most significant factors in their language learning process was the specific methodology and procedures that the teacher used. This methodology included an emphasis on oral production in the foreign language such as "read and report", panel discussions, oral presentations, small- and whole-group discussions, etcetera which the participants signaled as significant to their development.

What I have seen, because everything is oral and all the activities are done orally. The presentations, even, you have to stand up and speak ... (Interview AK)

...I think that the oral part is more demanding because we were always reading. The answer to all the work that we did always was expressed orally later; there were oral quizzes, presentations...What else? Ah. The midterm that day was only oral; the oral requirement made you to try to get better... (Interview KR)


We realize that including many opportunities for output in a course is instrumental in learning no matter what methodology is applied. However, we see the use of the methodology of CBI, which is grounded on the use of content material, facilitated language gains by supplying topics and material that were interesting, meaningful, and closely related to what they were doing in their major. This abundance of content, unlike in other general English teaching methodologies that use isolated and artificial language situations and tasks (e.g., What is Mike doing? He is painting the fence.), provided the participants with multiple opportunities for interaction in authentic, meaningful language situations, topics, and tasks. To put it simply, students spoke a lot because they had a lot of content to talk about. Thus, it is not unreasonable to infer that the quantity of content and real interest that this methodology offered fostered the use of a variety of activities which, according to students, helped them to improve their language skills.

From the evidence mentioned above, we can see that the meaningfulness of the material presented, activation of prior knowledge, and the specific methodology, characteristic to content-based instruction, were the main reasons why CBI supported language and content development. However, further study into this topic in the foreign language setting is needed to corroborate and extend upon these findings. Also, it would be insightful to investigate whether these same reasons behind student learning with CBI are significant and contribute to similar language

development in participants of other types of language teaching approaches.

## CONCLUSION

This study confirms the results of previous research as to the reasons behind the effectiveness of CBI and provides evidence of the factors that are important in this specific English as a foreign language context. It seems that the most significant factor behind the success of content-based instruction is the increase in motivation that students feel when the topics, materials, and activities used in class are relevant, meaningful, interesting, and useful to them and in present and future. This finding is consistent with the research in education, in general, and specifically second/foreign language acquisition during the last forty years which has placed major significance on the affective area as a factor in learning.

More than just a process of learning linguistic features and participating in activities in class, language learning asks students to perform in a language that they, at the same time, are trying to master. Therefore, in contrast with other subjects, students put themselves "on the spot" in the language classroom because they are more likely to make mistakes which can generate higher stress and anxiety (Tsui, 1996). However, because of CBI's focus on meaning rather than structure and the fact that the content information serves to activate the students' prior knowledge, learners seem to be less worried about making mistakes and more concentrated on expressing their ideas. Thus, as Stryker and Leaver (1997) suggest, CBI seems to erase the "artificial" separation between language and content and at the same time lowers students' affective filter, thereby fostering learning. 

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## Appendix 1

### Journal Prompts

Below we have listed the questions that the participants answered in their learning journals. Because learning journal one was used to pilot this data collection instrument on the participants, it is not included here.

#### Journal Two

1. What have you learned during the last two weeks?
2. How has studying anatomy and physiology helped you to learn English?
3. How have the activities done the last two weeks helped you to improve your fluency?

#### Journal Three

1. How has this class helped you to talk about anatomy and physiology topics in English?
2. How has focusing on content instead of grammar helped you to improve your English?
3. How has this class helped you with your other classes this semester? Explain.
4. How is what you are learning in this class going to be useful to you in the future?

5. How has this class made you more self-confident when using English?

#### Journal Four

1. How have you learned English this level?
2. How has this methodology helped you to improve your English in general and your speaking skills?
3. How have the readings and materials used in class helped you to develop English?

#### Journal Five

1. How useful has the content covered in class been?
2. How useful has learning language through content been to help you improve your English?

## Appendix 2

### Semi-structured Interview Protocol

Below we list the general questions that we devised for each student prior to the interviews, but during the natural course of the interview, some other questions arose that are listed below for each focus group member. These questions were asked in Spanish, but we have translated them here.

1. What differences have you found between a regular English course and this course that is based on content?
2. Which methodology do you prefer? Why?
3. How have the differences affected your learning process?
4. How have the methodology and class activities contributed to your learning?
5. What topics have you learned to express in English?
6. How has this class helped you to speak about the different topics?
7. How have the classroom activities raised your self-confidence when you are speaking?

Besides the general questions above, the researchers asked the following questions to the focus group members.

**AK**

1. In the beginning of the course you wrote that you were "very motivated." Do you still feel this way? How has learning English with medical concepts affected the way you feel about English?

**KR**

1. In the beginning of the course you wrote that you were "somewhat motivated." Do you still feel this way? How has learning English with medical concepts affected the way you feel about English?
2. In the first learning journal, you stated that learning English using anatomy and physiology was more "beautiful." What did you mean by that?

**MJ**

1. In the beginning of the course you wrote that you were "very motivated." Do you still feel this way? How has learning English with medical concepts affected the way you feel about English?
2. In the third diary you said that the class activities had helped you with your other subjects because it is easier to understand homework and clinical cases. Could you explain us how this methodology has helped you with that?

**ML**

1. In the beginning of the course you wrote that you were "somewhat motivated." Do you still feel this way? How has learning English with medical concepts affected the way you feel about English?